The 47th Asia Pacific Academic Consortium for Public Health Conference

PUBLIC HEALTH CHALLENGE IN THE ASIA PACIFIC REGION: BUILDING REGIONAL INITIATIVES FROM LOCAL EXPERIENCES AND BEST PRACTICES

BANDUNG, INDONESIA, OCTOBER 21ST-23RD 2015

PROCEEDING BOOK
Proceeding Book
The 47th Asia Pacific Academic Consortium for Public Health Conference

Faculty of Public Health
Universitas Indonesia
2015
Proceeding Book The 47th Asia Pacific Academic Consortium for Public Health

Contributor:
Conference's Delegates


Editor:
Dwi Gayatri
Popy Yuniar
Ede Surya Darmawan

Cover and Layout Designer:
Muhammad Ihsan Santoso

Faculty of Public Health Universitas Indonesia
B Building 1st Floor
Kampus UI Depok - 16424 - Indonesia
Telephone/Fax +62217864975
Email fkmui@ui.ac.id
http://www.fkm.ui.ac.id
Content

Welcome Message .................................................................................................................. 1
Plenary Session Abstract ..................................................................................................... 7
Symposium Session Abstract .............................................................................................. 11
Free Paper Proceeding ........................................................................................................ 25
Poster Proceeding ............................................................................................................... 361
Author Index ...................................................................................................................... 637
Welcome Message

I wish you all a warm welcome to Bandung, Indonesia

It is a great pleasure for me to invite you to the 47th Asia Pacific Academic Consortium Of Public Health (APACPH). This is the second APACPH conference that is held in Indonesia and it is an honour that the Universitas Indonesia has been selected once again to host and organise this prestigious event. The conference is held at Grand Royal Panghegar Hotel and Convention from October 21-23, 2015. In addition, there is a Pre-Conference Program that is held on October 19-20, 2015.

We are expecting a congregation of 1200 participants, with over 500 coming from abroad. This conference is designed in such a way so that delegates from various countries may share their local experiences and best practices and discover ideas for strong regional initiatives.

Over the years, APACPH has been working hard to be an organisation that helps expand communities’ knowledge in public health through its annual conference. As Organising chairman I would like to say thank you for all committees; my colleagues, academic and education staff s, also Students in Public Health Faculty Universitas Indonesia who have been working to be part of an organisation “Every body work hard” and I am confident that the conference will be able to give successful result and may the outcome shape better practices in Public Health for the future.

Thank you for your participation in this conference, I hope you enjoy not only the conference but also beautiful scenery and rich culture in Bandung and return home with a fond memory of Bandung. I wish all of you the best health and happiness

Sincerely,

Dr. Ede Surya Darmawan, SKM, MDM
Chief Organizing Committee
Welcome Message

I take great pleasure in welcoming you to the 47th APACPH Conference, which is held at Grand Royal Panghegar Hotel and Convention, Bandung, Indonesia on the 21st-23rd of October 2015. APACPH is an academic consortium of 81 public health institutions from 23 countries across the Asia-Pacific region. The vision of the Consortium is to achieve the highest possible level of health for everyone in the nations of the Asia-Pacific region. APACPH aims to enhance regional capacity to improve the quality of life and to address major public health challenges through the delivery of education, research and population health services by member institutions. APACPH supports activities that forward its five main objectives: (i) To enhance the quality and relevance of educational and training programs in public health; (ii) To expand knowledge, improve skills and demonstrate effective interventions; (iii) To raise the awareness of current, emerging, and re-emerging public health issues, and develop programs of action for their resolution; (iv) To enhance the capacity and sustainability of public health systems; (v) To assist in policies and leadership developments for health.

It is an honour for Universitas Indonesia (UI) to host this prestigious international conference. The conference program will be covering a range of topics in public health areas that would be both interesting and beneficial for the fellow participants. Moreover, the many presentations at this conference will address common issues and the problems faced by professionals in public health. We hope that this conference will serve as a platform for all of us to learn and share. This is particularly important for us as it is by working in partnership and to collaborate with other individuals, institutions and sectors that we are able to address major public health challenges. We hope that the conference will help us create an environment of mutually rewarding scientific researches and collaborations that will augur well for advances in public health. We also invite you to enjoy The Flower City Bandung, The Paris of Java where the natural landscape unites with beauty, fashion and traditional cuisines that are presented by local people through modern innovation.

I thank everyone for your participation at the 47th APACPH International Conference. I hope that from this conference, we all have received something that will be both important and useful for the future of public health.

Sincerely,

Agustin Kusumayati, MD, MSc, PhD
Chair of 47th APACPH Conference
Welcome Message

Welcome, Selamat Datang

Welcome to all the conference participants, invited speakers, and distinguished guests to the 47th Asia Pacific Academic Consortium for Public Health (APACPH) Conference here in Bandung. We are proud to host the conference this year.

At present, global problems are characterised by complex interconnection of sectoral problems. The increasing number of population leads to other problems such as; deforestation, high emission, food shortages, poverty and health problems. Global problems are also transnational in nature. Various problems are increasingly related to one another in ways we never anticipated before. Climate change for example, is now related to prevalence of infectious diseases. Solutions are therefore impossible to be enacted by one institution single-handedly, and will rather require trans-institutional and national efforts. The imperative moral of this new millenia is “global problems, shared responsibility”.

Public Health is a pivotal area of concern for society. As one of the global problems it poses a challenge to our planetarian based civilization. The challenge is so critical that it requires convergence of knowledge through multidisciplinary and interdisciplinary approach. It also an imperative for collaborative effort among the best higher education institution known in health sciences. Today, however, I could say that we can face both familiar and emerging challenges with increasing confidence because of new forms of knowledge that are continuously being formed in such trans-disciplinary and trans-institutionally manner.

A number of interesting topics are being covered by speakers in this year’s conference. Several topics will be highlighted and discussed such as health policy financing in universal health coverage, health promotion and social determinants, infectious disease, non-communicable diseases and changing life style, reproductive health, aging and the quality of life, adolescent risk and protective behavior in health, environment health challenges in the era of SDGs, occupational health and safety, nutrition double burdens: obesity, stunting and social-economic determinants in PH, best practice in PH through local wisdom, disaster: PH action and response, informatics development for PH programs, tobacco control and special PH interest.

I wish you a richly rewarding conference and a recharging experience on our beautiful city, Bandung.

Sincerely,

Prof. Muhammad Anis M.Met
President Of Universitas Indonesia
Welcome Message

Dear APACPH colleagues and friends,

Welcome to the 47th APACPH Conference on “Public Health Challenges in the Asia Pacific Region: Building Regional Initiatives from Local Experiences and Best Practices”. I would like to sincerely thank Faculty of Public Health, Universitas Indonesia, the organizers and the committee, who have been contributing their expertise, time, and efforts to make this Conference successfully held in Bandung, Indonesia on the 21st – 23rd October, 2015.

The 47th APACPH Conference aims to reflect global health trends, public health issues, and strategies being developed to impact health improvement in communities globally and especially among APACPH member countries in the Asia Pacific Region. This event is specifically designed as a platform for scholars, practitioners, leaders, and policy makers to learn and share their knowledges and best practices to enhance the quality of life and to address major public health challenges through the delivery of education, research and population health services by member institutions. The message of this conference is clear to drive innovation locally and internationally in the area of health promotion, disease prevention, and development of health systems and scaled up these initiatives from each country through the Asia Pacific Region with greater focus on a long lasting impact on health outcomes across the globe.

With our academic achievement and significant contribution towards research, APACPH has been widely acknowledged as the globally organization, whose members aim to tackle the unique public health challenges of the Asia-Pacific region. Since 1984, with five members, APACPH now has over 81 member institutions in 23 countries throughout the Asia-Pacific region with 8 regional offices in Bangkok, Beijing, Brisbane, Hawaii, Tokyo, Malaysia, Indonesia, and Korea. In the name of the president of APACPH, I hereby extend my sincerely thank to each of you to be a part of this conference. I do hope that this conference will enrich your experience, provide new insights, new inspirations, and new network of coalitions to strengthen public health and global health regionally and worldwide. I wish you a pleasant stay in Bandung and have a great successful conference. I look forward to your participation at the 48th APACPH International Conference and see you all again next year in Japan.

Thank you very much.

Phitaya Charupoonphol DVM., MD., DM(HRM).
President of APACPH
Dean of Mahidol University International College
Welcome Message

Dear Participants,
It is a great pleasure to hold 47th Asia-Pacific Academic Consortium for Public Health Conference in Bandung, Indonesia. Each of your presence to the event is greatly appreciated.

With the persistent growth in demographic and economic trends in Asia, we are now talking of an “Asian Century.” With the growing migration and globalization in general, the cooperation among the countries and especially that of the Asia-Pacific region stands as one of the major priorities. As we have learned from Ebola virus disease outbreak, public health issues cannot be excluded when dealing with cooperation as well as national security. It is necessary for each country to share their issues and to learn from each other regarding public health. In order to grow public health experts and to increase the awareness of public health to the general population, the academic institution holds great responsibility.

APACPH aims to enhance the quality and reference of educational and training programs in public health to assist in policy and leadership development for health and to enhance the capacity and sustainability of public health system. With the great opportunities in qualified public health education and training, we thrive to achieve the highest possible level of health of all the people of the nations of the Asia-Pacific region. I hope this meeting would be fruitful in discussing challenges and suggestions on the future direction of APACPH. Once again, thank you for your participation.

Sincerely,
SOHN Myungseil
President-Elect of APACPH
PLENARY SESSION ABSTRACT
From Data To Health Policy – Global Dental Immunization Initiative

Dr Adang Bachtiar MD MPH ScD
Universitas Indonesia – School of Public Health
Kampus Depok – Indonesia
adang@post.harvard.edu

ABSTRACT

Dental public health problem in Indonesia is big and does not show better result year after year. Similar pictures are shown in many countries especially in developing world. Challenges showed up in dental public health program were always (1) do not have adequate funding, simply because the program always has low priority in comparison with MDG priorities, as an example, (2) the program terminated when the government funding was stopped, and (3) most important, whether the program really gave impact in the oral health as a whole. There were significant change in dental public health program in Indonesia since 2011, where Innovative School Oral Health Services (ISOHS) policy was started. This policy was established based on a dissertation developed by Irene Adyatmaka in 2008 from School of Dentistry Universitas Indonesia. Until 2015 there are 179 schools with more than 15,000 pupils already have the ISOHS funded by themselves with no government support. The program attract many other countries such as US, UK, Australia, Malaysia, Brunei, Timor Leste, and other.

Currently the ISOHS gradually changes into Dental Immunization Initiative for an expanded target not only school based but the community. Some collaboration is in preparation, initiated by Dr Irene Adyatmaka and team, with Harvard School of Dental Medicine and King College School of Dentistry UK. Further collaboration is welcome.
The Role Of Public Health Professionals In Health Development – Lessons From Malaysia

Dahlui M, Bulgiba A

ABSTRACT

Health is a fundamental human right. Public health professionals have been at the forefront of protecting that fundamental right and ensuring that the health of populations are protected and improved. The demographic and epidemiologic transition experienced in Malaysia has to a large extent been influenced by its economic progress and public health measures. Up until now, Malaysia has done well as evidenced by its relatively healthy population. The structure of Malaysia’s public health care services has changed over the years to provide more and more services in line with changing disease trends. However, rising healthcare costs and a change in disease patterns over the years means Malaysia needs to change its public health care approach. In the past, health promotion and disease prevention was considered a public health job only for governments. This approach needs to change if Malaysia is to address rising levels of non-communicable diseases and prepare for rapidly-spreading infectious diseases. One possible way this can be brought about is by changing the way public and private health care is structured and funded for all Malaysians. This will hopefully result in a better quality of life for all Malaysians.
Plenary Session On The Role Of Public Health Professional At The 47th APACPH Conference 2015

Phitaya Charupoonphol
Mahidol University International College
Thailand
phphitaya@gmail.com

ABSTRACT

According to challenges towards health development post 2015, which are global emerging challenges, an epidemiology of demographic transition, climate change, a global critical shortage of health workforce, limited access to energy, costly technology driven health service system, there has been a solid movement in health education reform among different countries across South East Asia Region (SEAR) and Western Pacific Region (WPR). In order to promote a healthy and caring ASEAN Community, Thailand has conducted and planed for health workforce education reform, aiming to achieve the maximal health, through healthy lifestyle, universal access to quality health care and financial risk protection, safe food and healthy diet, a healthy environment with sustainable inclusive development, where health is incorporated in all policies.

Several criteria for quality assurance, such as AUN-QA / EdPex and APACPH accreditation, are encouraged for public health education assurance in Thailand. In 2010 Thailand Movement on Strengthening Health Workforce started, under the WHO 2010 Framework for action on Interprofessional Education and Collaborative Practice. Since 2012, Thailand has conducted a research to develop Thailand Qualification Framework for public health education.

In 2013, SEAR has highlighted health workforce as priority for post 2015, thus, the Asia Pacific Network on Health Professional Education Reform (ANHER) with SEARO support are urged to develop action plan to gain policy blessing, support and commitment as well as partnerships between the institutions and the health care delivery systems to be more responsive to population health need. To strengthen the linkage of regional and global health workforce education, Thailand works on participatory and voluntary basis as a multi professional manner as a mechanism of a national movement with grant support under the newly established “Health Professional Education Foundation” to promote transformative and inter professional transformative education reform. A common protocol and tools to survey national and institutional levels of medical, nursing and public health education had collectively developed and adopted by Thailand National Health Professional Education Forum with a grant support from SEARO. Assessment of final year students and graduates on their attitude, competencies and readiness to serve rural health services were included. Six strategies to achieve transformative learning for health equity are education policies reform, fostering better collaboration, management and administration reform, curricula and learning process reform, knowledge management and networking. New competencies of public health professional were strengthened on emerging public health problems, both in terms of practice and leadership, to provide operating essential public health services systematically by expansion of the pool of personnel and experts across regions. These evidences serve as platform for national strategies to transform health professional education systems in Thailand.
SYMPOSIUM SESSION ABSTRACT
Symposium Indigenous Health

Honai (Traditional House) Modification To Reduce The Exposure Of Indoor $SO_2$, And $NO_2$ In Wamena, Papua

Prof. Dr. Andi Zulkifli A.L., Prof. A.L. Rantetampang and Anwar Mallongi, PhD.

ABSTRACT

The use of biomass indoor Honai (traditional house) in Wamena have been conducted for several decades and become a traditional habit of Honai occupants. Since air temperature at night in Wamena Regency is cold the inhabitants burn the Kasuari woods to warm their body. As a result, they continuously inhale the Sulfur Dioxide ($SO_2$) and Nitrogen Dioxide ($NO_2$) and some contaminated air in Honai room daily which may lead to varies illnesses. This study aimed to investigate the $SO_2$ and $NO_2$ contaminated honai indoor air, record the air contaminated inhalation rate and lung vital capacity among the honai occupants at five villages in Wamena regency. Samples were collected from 15 Honais before and after the honai modification by recording the $SO_2$ and $NO_2$ levels. Likewise, 30 inhabitants of Honai occupants were measured for their lung vital capacity as well as the personal $SO_2$ and $NO_2$ inhalation rate. Sample of $SO_2$ and $NO_2$ were collected used midget impinger technique and concentration measured by using the pararosaniline-spectrofotometri. In addition, lung vital capacity was measured use a spirometric whereas personal inhalation was measured by personal inhalation tool.

Results implied that, of those five villages showed the mean of $NO_2$ values before honai modification were $4.011 \pm 1.138 \mu g/Nm^3$, some recorded values have exceeded the standard ($3.00 \mu g/Nm^3$) and after the modification were $0.350 \pm 0.201 \mu g/Nm^3$, respectively. Based on the statistical t-test showed that the decrease in $NO_2$ concentrations was shown with p values of 0.000, or in other words no influence of honai modification to the decrease of $NO_2$ concentration. Likewise, $SO_2$ concentrations were between $0.650 \pm 0.454$ before modification and $0.057 \pm 0.048$ after modification indicated over the standard. The statistical t - test showed that a decrease in the concentration of $SO_2$ is shown with p values of 0.000, or no influence honai modification to decrease the $SO_2$ concentration. In addition, of 30 respondents with inhalation under the allowed standard, although all respondents have inhalation rate for $NO_2$ in the category parameters under the allowed standard, 40% of respondents have decreased lung vital capacity. However, for $SO_2$ parameter, of the 13 respondents with inhalation rate above allowed standard for $SO_2$, there were 92.3% who had a reduction in lung vital capacity and from 17 respondents for the rate inhalation category under allowed standard; all of them have normal lung capacity function. Results of statistical tests using yate’s correction showed that the value of $p = 0.000$, which means that there is a relationship between inhalation rate with decreased lung function capacity.

In conclusion, most of the recorded values of $SO_2$ and $NO_2$ indoor pollutants have exceeded the allowed standard. Likewise the high level of $SO_2$ and $NO_2$ concentration air inhalation have leaded to the decreased of lung vital capacity and might lead to adverse health effects. Therefore a serious healthy honai modification is highly required as well as the chimney installation and sanitary honai environment.
Health Trend In Focus: Diseases Affecting The Indigenous Population In Fiji

Dr. Santha Muller,
Director and Associate Professor
Medical Research Laboratory and Research Center,
Fiji National University, Fiji

ABSTRACT

Fiji consists of more than 300 islands and about 110 are permanently inhabited covering a total land area of 18,376 square kilometers. Fiji lies in the heart of the Pacific Ocean midway between the Equator and the South Pole. The two largest islands of Viti Levu and Vanua Levu comprise of more than 85% of the total area. Fiji is relatively a small low income country in the Pacific with a largest population of all Pacific island countries. Fiji has an estimated population of 893,000 which ranks 161st in the world. The population of Fiji is relatively young with 48% under the age of 25 years. Fiji’s population is comprised mostly of native Fijians who are indigenous group or iTaukei (54%) and Indo Fijians (38%) who are descended from India, brought to the region by the British in the 1800s. The burden of both communicable and non-communicable diseases (NCDs) continues to be the national health challenge. There is numerous studies report that indigenous people have higher rates of non-communicable diseases than the general population. There is steady increase in the NCDs also known as life style diseases and related diseases in Fiji due to a change in the traditional environment to a urban and western oriented food. One of the major NCDs like diabetes and its prevalence in adults in the Pacific islands region is among the highest in the world (WHO 2010) and Fiji is no exception. It is estimated that one out of 4 Fijians are affected by this disease. The main three risk factors identified for the most disease burden in Fijiare high BMI (obesity), change of dietary pattern to processed food from the traditional food and lack of physical activity. This shows the record of large differences by ethnicity with significantly more obese iTaukei than Indo-Fijians. The health statistics also shows an alarming increase of NCDs and more importantly the complications of diabetes among the iTaukei population making it the most common cause of non-traumatic amputation and second most cause for blindness in Fiji. Fiji as a country has taken huge efforts to address the consequences of its rapidly evolving NCD epidemic with a high level of commitment and recognition with support from regional and global actions (WHO 2011a, b, c and UN 2012).
Metabolic Syndrome Affecting The Indigenous Orang Asli Population In Malaysia & Future Scenarios

Myint Myint Soe*, Sandheep Sugathan*, Sabaridah Ismail* & Osman Ali*
*Faculty of Medicine, UniKL Royal College of Medicine Perak, Malaysia

ABSTRACT

The Orang Asli are the indigenous peoples of Peninsular Malaysia who lived in Malaysia since 5000 years ago, and now represent approximately 0.6% of Malaysia’s population. They are known to be of different origins from three main tribal groups and at least 95 subgroups, living in over 800 villages in close proximity to the forest, in the outskirts of existing rural villages or in remote areas throughout Peninsular Malaysia. Throughout the years, the Orang Aslis have lagged far behind compared to the general population of Malaysia, in all aspects of socio-economic development, education and health status indicators, with 35.2% of them still being hard core poor according to 2003 statistics.

Some studies have reported that modernization of Orang Asli in Malaysia has exposed them to lifestyle related diseases. In the earlier days, the Orang Aslis had been mostly dependent for their livelihood on the forest, which engaged them in high physical activity and a simple diet, thus they were reported to be healthier than their neighbouring urban population. Now, as their lifestyles change with the government implementing various infrastructure development, social and educational programs and creation of business opportunities for earning higher incomes to upgrade the quality of life and socio economic status of the Orang Asli population, they are being exposed increasingly to lifestyle related diseases. Again, at the same time even nowadays, the prevalence of communicable diseases such as skin infections and intestinal helminthiasis are still as high as 50-70% among them. The orang Aslis, as other developing populations are bearing simultaneously the burden of both a high prevalence of communicable diseases and an increasing prevalence of non-communicable diseases.

Our recent study in 2013 on the prevalence of metabolic syndrome based on ATP 3 criteria among the Orang Asli population, found a prevalence of 13.8% among the Orang Aslis; as compared to 27.7% among the neighbouring rural Malay population, which is similar to results of a population-based survey in Malaysia. We found the prevalence of life style risk factors for metabolic syndrome to be high among the Orang Aslis with 67% prevalence of poor physical activity, 56.6% having poor dietary habits and 28.8% smoking. Studies have also reported increasing prevalence of individual risk factor components of metabolic syndrome as well, such as central obesity, raised blood pressure, hyperlipidaemia, raised fasting blood glucose levels and a younger onset of diabetes among the Orang Asli population. The indigenous populations are seen to catch up fast with the changing lifestyle risk factors and lifestyle related diseases of the general population. Unless health care policies and timely measures are taken to incorporate programs for the development of healthy lifestyle among the Orang Asli to combat the situation, the future scenario could be serious with regard to the health status of the indigenous population and the individual and government costs for health care.
Social Engagement With Indigenous People: Unikl Experience In Inculcating Caring Attitude Among Medical Students

Abdul Karim Russ Hassan
Universiti Kuala Lumpur Royal College of Medicine Parak, 30450 Ipoh, Perak, Malaysia
karim@unikl.edu.my

ABSTRACT

The health status of the Orang Asli (Aborigines) in West Malaysia remains low with access to certain health centres and hospitals in remote areas being limited. The students’ engagement with the Orang Asli communities would help them improving their perception to be more compassionate with these limitation. The objectives of the programmes are to engage the medical students to the realities of rural communities, and to expose the students through introduction of primary health care approach and health promotion activities. In addition, the students participated in the Rural Medical Mobile Mission (RM3) to promote health research among the Orang Asli communities from various tribes; comprising mainly of the Temiar, Jahai, Batik and Semai living in different localities in peninsular Malaysia. These programmes have been conducted since 2007 in remote areas in the state of Perak, Kelantan and Pahang that can be accessible by four wheel drive or by boats. In Pahang, the activities were focussed among the communities residing along the river bank of Tembeling. They comprise of semi nomadic Batik tribeliving in the periphery of the National Park. In Perak, the activities involved those living in the periphery of the rainforest of Royal Belum State Park inhabited by the Jahai tribe, the Temiar tribe residing in Kuala Kangsar and Kinta District of Perak, and those communities living in Gua Musang, Kelantan.

We have provided mobile medical services to the villagers by providing primary medical care to those with minor medical conditions. The students were given opportunities to conduct their research project on the health of the indigenous communities, including screening for hypertension, diabetes mellitus and measurement of Body Mass Index (BMI). The students have also conducted research on intestinal parasitic infestation among the communities. The children in the community were taught personal hygiene through proper techniques of hand washing and oral hygiene, and engagement in sports activities. The students organised programmes for the primary school children through sport activities, guidance in drawing activities, reading and basic mathematics lessons. Those with skin infections were given treatment and their parents were advised on proper application of medication. For lice infestation, they were given medicated shampoo, and single dose albendazole was given to children for deworming.

The students were divided into various committees that also included raising funds to support their activities such as organizing the meals and feeding programme for the communities. The students gain experience by these activities and were later able to organize activities that involve the rural communities on their own. They were better prepared in communication skills and more prepared for being posted in rural areas after finishing their houseman-ship in major hospitals. They could be posted to rural areas of east Malaysia where their services are mostly needed and other hospitals in the west Malaysia. In addition, these programmes promote the spirit of altruism among the medical students.
The Trend Of Communicable Diseases Especially Soil Transmitted Helminthiasis (Sth) Among The Indigenous People: Effect Of Socioeconomic Development And Community Empowerment Program On Intestinal Parasitic Infections Among Orang Asli (Aborigines)

Sabaridah Ismail\textsuperscript{a}, Bharathalingam Sinniah\textsuperscript{a}, Myint Myint Soe\textsuperscript{a} and Osman Ali\textsuperscript{a}

\textsuperscript{a} Faculty of Medicine, Universiti Kuala Lumpur Royal College of Medicine Perak, Ipoh, Perak, Malaysia.
Email:sabaridah@unikl.edu.my

ABSTRACT

Orang Asli are the aborigines of peninsular Malaysia. These minorities live in close association with the forest. Malaysian Government has initiated many programmes to move them out from the forest, aiming to upgrade the socio-economy and quality of life of the aborigines. Today, the majority of them live outside the forest or at the forest edge. Supporting programmes for socioeconomic upgrading include infrastructure improvement of public utilities such as construction of tarred roads, building bridges across rivers and electricity supply. There are also many programmes to upgrade the health of the Orang Asli community, allocating large amounts for building proper housing with improved sanitation facilities and proper sewage disposal system. Most Orang Asli villages are now supported to have clean water supply by gravity feed system or tube wells. Some Orang Asli villages closer to urban areas now have treated water supply.

The government has provided mobile and static health services for these villages. Initiatives for better income include development of agriculture activities such as palm and rubber plantations that offer job opportunities and incomes for them. Business opportunities are also given high priority to upgrade the socioeconomic status such as allocating specific business areas for the Orang Asli especially at tourist spots, dedicated shop-lots including financial support. Entrepreneurship and business skills trainings are provided to those interested in business. The implementation of these programs have produced some impact on the Orang Asli community with reduction in poverty rate.

The improvements in socioeconomic status have shown positive impact on the health status as well especially as reflected in the reduction of intestinal parasitic infections among the Orang Asli communities. Since 1960, studies have shown considerable variation in the prevalence of intestinal parasites in the Orang Asli population, with prevalence ranging from 90%-100%. Several studies over the past 20 years showed further decrease in prevalence of intestinal parasites ranging between 50% to 70%. The most common parasites detected were Ascaris lumbricoides (ranging from 4.6 – 86.7%), Trichuris trichiura (2.1% to 98.2%), and hookworm (0-37.0%). The common intestinal protozoan parasites detected were Giardia intestinalis, Blastocystishominis, Entamoeba coli, and Entamoeba histolytica with prevalence fluctuating between 1% to 40%.
Symposium Quality of Life of the Elderly

Problems, Policies And Program To Improve Quality Of Life Of The *Warga Emas* In Malaysia

Noran N Hairi, Choo Wan Yuen, Sajaratulnisah Othman, Farizah Mohd Hairi
Faculty of Medicine, University of Malaya, Kuala Lumpur
farizah@ummc.edu.my

ABSTRACT

By the year 2013, Malaysia will be an aged nation where 15% of her total population is 60 years and above. Malaysia’s ageing population growth is escalating very fast compared to the western and developed countries. This phenomena is very alarming.

Realising this trend and the challenges we faced towards escalating *Warga Emas* (elderly population) in Malaysia on our demographic pattern, social, health and economic situation, the government established a ‘National Policy for Older Persons’ (1995, revised 2010) and an ‘Action Plan of National Policy for Older Persons’ (1999, revised 2010). The ‘National Policy for Older Persons’ is our government’s commitment to create a society of senior citizens who are independent, contented and possess a high sense of self-worth and dignity, by optimizing their potential through healthy, positive, active and productive ageing to improve their well-being along with national development. This is a unified, holistic, inter-sectoral national policy; followed by a formation of National Advisory and Consultative Council for the Older Persons with the Department of Social Welfare as the national secretariat.

Subsequently our Ministry of Health developed a ‘National Plan of Action for Health Care of Older Persons’ (1997). A National Technical Committee for Health of the Older Persons (1998) was also formed under the Ministry of Health. Recently in 2008, Ministry of Health developed a ‘National Health Policy for Older Persons’. It is to ensure healthy, active and productive ageing by empowering the older persons, family and community with knowledge, skills, an enabling environment; and the provision of optimal health care services at all levels and by all sectors.

Our programmes for the elderly are integrated both within the public and private sectors, at the Primary (i.e. in the health clinics), Secondary and Tertiary Care (i.e. in the hospitals) levels. Ageing is a privilege and a societal achievement. It is also a challenge, which will impact on all aspects of 21st century society. It is a challenge that cannot be addressed by the public or private sectors in isolation: it requires joint approaches and strategies. It is our vision to ensure that the continuity of our *Warga Emas* policy and programmes will improve the quality of life of our *Warga Emas* in Malaysia.
Symposium Acceleration of Kangaroo Mother Care

Acceleration Of The Kangaroo Mother Care (Kmc) To Reduce Neonatal Mortality: A Global Perspective

Hadi Pratomo*
*Professor Dept of Health Education & Behavioral Sciences, Faculty of Public Health, Universitas Indonesia
Member of Board of Advisors, Perinasia Executive Board (2012-2015)
Member of Global Task Force on Kangaroo Mother Care (KMC) Research

ABSTRACT

In 2010, 40% of the childhood mortality was neonatal mortality. Preterm was the highest cause of neonatal mortality. Over the years the reduction of neonatal mortality was not as fast as the under-five mortality. Every year it was estimated there were 1.1 million preterm deaths. From 9 types of intervention among the newborn, the KMC was one of the evidence-based intervention in reducing neonatal mortality. Therefore, there is a critical need to address both newborn and preterm birth by accessing the KMC services.

Theoretically the KMC could avert 450,000 deaths per year if near-universal KMC services take place. Due to different barriers, accessibility of KMC services do not happen. It is urgently needed to make a case of KMC acceleration around the globe.

From the global review it is important to ensure continuous KMC is practiced and the newborn is fed adequately in health facilities by appropriately trained staff. Both utilization of data and monitoring of the KMC services are absolutely needed. In addition, providing support for continuous KMC to be practiced at home after discharge is also essential. The KMC establishment and continuous services is not only creating policies and conducting KMC training. Integration of KMC into other relevant training materials and pre service education must guarantee acquisition of KMC competencies. Several research issues to accelerate KMC have been identified.
Symposium Public Health Law Related Projects

Social Engagement With Indigenous People: Unikl Experience In Inculcating Caring Attitude Among Medical Students

Amanda Jimin Kim
Asian Institute for Bioethics and Health Law, Yonsei University, Republic of Korea
Ajk46@yuhs.ac

ABSTRACT

Asian Institute for Bioethics and Health Law (AIBHL) is involved in many activities and projects with government and non-government organizations. One of the big government projects AIBHL is involved with is Ethical Legal Social Implication project which deals with ethical legal social implications regarding research of human genomics in South Korea. The first ELSI project in Korea was conducted in 2003. Since then, the most of Human Genomic ELSI research has been conducted by private institutes or University research centre funded by the government. AIBHL under Yonsei University has conducted one of the ELSI projects supported by Ministry of Health and Welfare.

The Objectives of ELSI research project include the following: 1) To encourage ELSI study and human genomic research in Korea by consulting and helping human genomic researchers in the aspects of ELSI and also by encouraging academic activities of ELSI researchers; 2) To promote social understanding by encouraging public discussions regarding human genome research and by promoting it to mass media to raise public awareness; 3) To suggest ethical legal and political considerations by developing guidelines in the context of ELSI and by passing legislations; 4) To build collaboration with other ELSI researchers. The ELSI project contains surveys to understand the opinions and understanding from different social groups including general public to research experts. One of the survey results on expert’s opinions on human genome research showed that the researchers felt it was inconvenient and difficult to re-consent after the study was conducted because all data have been already anonymized when collected. Some of the ethical conflicts in human genomic research they discussed included the issues of research results not directly helping the sample donors and the conflicts between the patients’ right to know vs. right not to know.

Using the survey results in developing guidelines for protecting genomic information, the guideline was suggest by AIBHL regarding matters of privacy protection, informed consent, collecting and sharing of human genomic data. The purpose of developing guidelines was to develop practical standard operating procedure manual for researcher in human genomics and to develop educational contents. On September 22nd to 23rd, International Workshop on ELSI was held in Seoul. The purpose of ELSI International Workshop was to share the progress of different countries and to share and learn from each other regarding policy making guidelines that suits cultural social values and to solve ethical issues. As the ELSI study in Korea is increasing in its fund and size, the importance of ELSI regarding human genomics is raised. More genome researches are conducted and more effective ways to protect personal information are required. The growing expansion of collaboration and comparative studies and more explicit international ELSI research network would facilitate to achieve mutual empowerment with education and widening the cultural perspectives.
Achieving Transparent Healthcare Expenditure Monitoring Through Hira System

Jong Soo Ryu
Health Insurance Review and Assessment Service

ABSTRACT

Korea’s population is about 51 million and with around 11% of the elderly at present, Korean population is ageing fast. Due to the ageing society, we are becoming more concerned about healthcare expenditure. Currently, healthcare expenditure is taking up approximately 7.2% of the total GDP. The Ministry of Health and Welfare enacts and revises relevant laws, while being the supervisor of overall program. There are two agencies that fulfil the NHI services: Health Insurance Review and Assessment Service (HIRA) and National Health Insurance Service (NHIS). HIRA is in charge of benefit claims review and healthcare service quality assessment - makes rules for benefit list, performs monitoring of cost and quality and manages health system infrastructure. NHIS’s core responsibilities are premium collection, negotiation with providers for fee level and promotion of health and disease prevention. Korea’s National Health Insurance (NHI) is based on single payer system, depends on fee-for-service payment system and covers entire population and essential services. Major services are delivered by private providers and all health providers must be enrolled to the NHI so that the government can effectively control the private dominant health care systems. Korea has an independent purchasing organisation, HIRA and most of the information is electronically exchanged. Through these efforts, sustainability, system development, medical quality enhancement and medical cost adjustment have been achieved.

The NHI system works from the moment when a patient visits a health provider. There are three steps in NHI system: treatment and prescription, claim review and evaluation, notification and use of result. When a patient visits a provider, the provider can check eligibility of the insurance and access to benefit list of recent medical service, treatment and drug. Also, 99% of providers use DUR system of HIRA that provides contraindication information about the prescribed drug on their personal computer. When the provider submits claim, it is submitted real-time to HIRA. Benefit list is determined by HIRA and NHIS, and the Government is utilized by the provider in submitting electronic claim. The claim review and assessment takes 15 days for the electronic one and 40 days for the paper one. After reviewing, the result is sent to NHIS for reimbursement. As of 2014, about 1.46 billion claims are submitted to HIRA and the number of claim is increased by 7% each year, showing Korea’s healthcare expenditure is increasing. Then, the assessment result is notified to NHIS and NHIS pays to the provider based on the result. Korea’s health insurance system has some advantages in the international cooperation. First, we are based on modern day state of the art ICT system. Second, we have vast amount of data from the unified NHI system, advanced ICT, and active link of health data. Third, we have had diverse policy trials during the process of rapid expansion of NHI. Finally, we keep the institutional memories. Based on the experiences of NHI purchasing, we could build both multilateral and bilateral collaborations. Also, we opened international training programs for the health care professionals in various countries. Through these efforts of international cooperation, we would like to support other countries, learn from the experiences and build mutual learning partnership – and thus to promote the policy dialogue and actions for strategic healthcare purchasing to advance the path of countries towards UHC.
Work Plan At Who Collaborating Centre Of Bioethics And Health Law

Si Woo Kim
Asian Institute for Bioethics and Health Law,
Yonsei University, Republic of Korea
swkim1219@yuhs.ac

ABSTRACT

Asian Institute for Bioethics and Health Law (AIBHL) is designated as a WHO Collaborating Centre for Health Law and Bioethics in 2014. As a WHO Collaborating Centre, AIBHL has developed three health law related projects during its designated period. The three projects are: analysing public health law in the Western Pacific Countries using new analysis tool; developing Web Centre for public health law archive; developing guidelines for patient safety against medical malpractice.

The project 1 is analysing public health law in the Western Pacific Countries using new analysis tool. The purpose of this project is to assess the public health law and strengthen the capacity of public health law. In 2011, WHO WPRO and AIBHL have developed a public health law framework including an assessment tool to assess country-level public health law and legislation. The tool includes several stages of laws and four modules and we . We decided to come up with country report law profile for each of the countries in the region using this tool. As for now, the tool has been applied to 27 countries and we concluded that we need to take appropriate action by establishing network and database using the collected information to strengthen health law.

The project 2 is developing Web Centre for public health law archive. We aim to collect public health policy and law on WHO WPRO Library in response to the request from various organisations. In the website, we can filter the data by country, type of law, subject, keyword and name of law. At this stage, 24 countries are already uploaded to database and other countries are still in the process. WHO WPRO is continuously having a discussion on how to make the information up to date and use the data in the future.

The last project is developing guidelines for medical disputes and patient safety against medical malpractice and we seek to establish a preventive system through case studies related to the cause of medical accidents collected from 2007 to 2011. We are done with collecting medical dispute sentencing, quantitative and qualitative analysis, review and consult from the experts and still in the process of developing a policy guidance to publish a book.

Aside from the projects, AIBHL also tries to hold public health law meetings with experts from other countries. Through the meeting, we seek to obtain up-to-date information and share the health issues.
Evaluation Survey On Tackling Dengue Problem Through CSR Activities Of Strengthening Elementary School Students ‘Role In Jakarta And Depok 2015

Sabarinah Prasetyo¹, Dadun¹, Fitra Yelda¹, Riza L Asmarani¹, Husein Habsi², Laksmi PD Silvana²

¹) Center for Health Research/Pusat Penelitian Kesehatan, FKM, Universitas Indonesia
²) Indonesia Association of Public Health Professionals / IAKMI Pusat

ABSTRACT

Indonesia recorded the highest dengue cases in Asia. Considerably, the Indonesia Association of Public Health Professionals supported by CSR of a private company - SC Johnson, took the initiative to strengthen the role of elementary school students in Jakarta and Depok region. Three types of intervention were employed; first was named as program schools those had training for teacher cascaded to students for acting as larva seeker or Jumantik Cilik; second was those surrounding schools were empowered by school of program; and third was schools only received poster on dengue matters. The first intervention was implemented by FPHUI students in mid year 2015, by providing training for teacher, and monitoring Jumantik Cilik who did five actions to combat dengue infection. Eventually it needs evaluation on efficacy of intervention.

A survey in 2015 was conducted in Jakarta and Depok in about three months after intervention. In each group, 20 schools were selected by random, thereafter 60 schools were sampled. In each selected school, self administered questionnaires were filled by 2 Jumantik Cilik, 2 parents, and 8 of Jumantik’s friends at school, besides interview done to 1 teacher and school principal, in addition to observation to school. In total, data were collected from 840 subjects, covering variables of knowledge, attitude, and practice in tackling dengue issues. Nonparametric statistics was employed.

All program schools had implemented planned-intervention, however 45% of second group schools did not accept empowerment from first group schools, and 65% of third group schools did not receive any poster. Of interventions, Jumantik Cilik program demonstrated better than others, impacting knowledge (p 0.00), attitude (p 0.00) and practice of themselves and friends (0.00), and teacher and school principals practices (p 0.00), but not significant yet to parents (p >0.05). Overall, teacher knowledge level was similar with parents and school principal (p 0.34), and it was higher than Jumantik Cilik and their friends. To conclude, Jumantik Cilik Program shows its effect on school community in combating dengue, but needs strengthening to affect persons at home.
Symposium On Research – Based Public Health Teaching And Learning

Prayoon Fongsatitkul, Ph.D.
Faculty of Public Health, Mahidol University, Thailand
Prayoon.fon@mahidol.ac.th

ABSTRACT

The history of public health education in schools of public health has been one of evolution and change in response to new knowledge, the needs of the times, and opportunities for improvement. Schools are again faced with the need to evolve in part because of scientific advances and the increased understanding of the determinants of health, their linkages and their interactions. Faculty / school of public health come from multi-disciplines and making schools uniquely poised to embrace the trans-disciplinary approach to education and research that is necessary for an ecological focus.

The objectives of this session were to increase knowledge of public health education and research to promote health equity and universal health care coverage for the ASEAN population. Priorities of public health research were identified as social determinants of health, health behavior modification, evidence base and public health measures, and policy research to promote health services accessibility for the specific groups.

Previously, public health education is a combination of learning experience designed to help individuals and communities improve their health by increasing their knowledge, influencing their attitude and practice. Research – based public health teaching and learning included learning by doing starting from how to select research proposal, research problem/strategy, making evidence base-results, such as a case study, effective intervention or innovation development and knowledge dissemination. Public health professional of the future will need understand and be able to use the new information system that provide the data upon which public health research and practices in based. They will need to be able to communicate with diverse populations and understand the issues, concern, and needs of these groups in order to work collaboratively to improve population health. Public health professional must have the skill and competencies necessary to engage in public health practice at many level like leadership, management and supervisory and its new knowledge should be applicable to the benefits of population health.
FREE PAPER PROCEEDING
A Case Control Study Of Risk Factors For Breast Cancer Among Women In Sana'a City, Yemen

Norfazilah A
Norfazilah A; Fatima IB AL-Darasy; Azmawati MN
Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia
Malaysia
norfazilah@ppukm.ukm.edu.my

Breast cancer is the most common malignancy among women in most developed and developing regions throughout the world. Breast cancer is also the most common cancer among Arab women with varying incidence rates between the Middle East countries. The aim of this study was to determine the risk factors of breast cancer among Yemeni women.

A case control study was conducted between May to September 2014. A total of 65 histologically confirmed breast cancer cases attending Department of Oncology Centre and Life Centre in Sanaa City and 100 controls were involved in this study. Cases and controls were given a self-administered standardized and structured questionnaire to obtain information on the risk factors. Multiple logistic regression analysis was applied this study.

The mean age of the cases and control were 44.75(8.74) and 38.42 (7.40) years. Increasing age group was associated with breast cancer with (aOR= 5.69, 95% CI: 1.98 - 16.36) for 45-59 year age group and (aOR=7.84 95% CI: 1.07 - 57.36) for 60 year age group compared to < 45year age group. Being uneducated (aOR = 3.80, 95% CI: 1.21 - 11.95), smoking (aOR= 2.59, 95%CI: 1.11 - 1.03) being overweight/obese (aOR = 3.51, 95% CI: 1.27 - 9.69), and having hypertension type 2 diabetes mellitus (aOR = 6.07, 95% CI: 1.63 - 22.63) were found to be associated with breast cancer. This study revealed modifiable risk factors of breast cancer among Yemeni women which should be the focus in any lifestyle modification health intervention programme.
A Case-Control Study of Colorectal Cancer in Relation to Lifestyle Factors and Genetic Polymorphisms: Design and Conduct of Colorectal Cancer Study in Jakarta

Hoirun Nisa
Hoirun Nisa; Chris Adiyanto; Wibri Ardini; Taslim Poniman; Rolf Saunar; Aditomo W
Faculty of Medicine and Health Sciences State Islamic University Jakarta
Indonesia
hoirun.nisa@uinjkt.ac.id

Colorectal cancer is an emerging public health problem in Indonesia and currently ranks among the three highest cancers. Lack of a colonoscopy screening and lifestyle changes might contribute to it. Very few studies have investigated the effect of lifestyle, diet, and genetic polymorphisms to colorectal carcinogenesis in Indonesia, and the results are conflicting.

We assess the roles of dietary and other behavioral influences, in combination with genetic polymorphisms, in colorectal carcinogenesis. We also examine the role of religious guidance for colorectal patients in Fatmawati hospital.

We use a community-based case control study, consisting of 200 cases and 200 controls. Both cases and controls are residents in Jakarta and three adjacent areas. Cases are patients with a confirmed histopathologic diagnosis of colorectal cancer and are undergoing surgery for the first diagnosis of colorectal cancer at Fatmawati Hospital. Controls are randomly selected in the community by frequency-matching with respect to the expected distribution by sex, age (10-year class), and residence. Dietary and other lifestyle factors are ascertained by in-person interview, and venous blood is obtained for genotyping. Informed consents are collected from the participants for genetic analysis. The study is still ongoing.

Results of this study will explain the etiology of colorectal cancer disease specific to the people of Indonesia in conjunction with lifestyle factors, diet, genetic polymorphisms and interactions between genetic polymorphisms and lifestyle factors in colorectal carcinogenesis. The role of religious guidance information during the treatment is expected to be a reference for non-medical measures to prevent the severity of the disease.
A Longitudinal Analysis Of The Effects Of The NCMS On Elderly Hospitalization In Chinese Rural Areas

ZhaoKang Yuan
ZhaoKang Yuan; Bingbing Pan; JiaoJiao Zou; Daniel M Cook; Wei Yang
Nanchang University
China
yuanzhaokang@126.com

Several studies have reported evidence that patients who had participated the NCMS were more likely to look for health care services. But in contrast, one study demonstrated that the effects of the NCMS are limited. Early studies reported primary analysis of the impacts of NCMS on the utilization of inpatient service in population of all ages, but little has been known about the impacts on elderly people. In addition, some studies were out-of-date in design or lacked vertical comparisons. Hence, this article specifically focused on longitudinal analysis of the effects of the NCMS on elderly hospitalization in rural areas of Jiangxi province, P.R. China. The elderly (aged 65 and above) data was separated from the total results from six surveys, which were conducted every two years from 2003-4 to 2014 by the School of Public Health at Nanchang University. The surveys were analyzed to explore longitudinal changes in the rates of elderly hospitalization, early discharge and hospital avoidance, and to estimate the impacts of NCMS after weighting the data. Weighted data intended to make the sample, which was derived from complex sampling methods, better represent the population of elderly in Jiangxi province. The evaluation of the impacts of NCMS will provide a policy basis for improving the Health Care System Reform.

This research aimed to assess the impacts of NCMS on elderly hospitalization from 2003 to 2014 in Chinese rural areas. A multistage stratified random cluster sampling method was employed to select about 1890 households from 27 administrative villages in Jiangxi Province in China at 2003-4, 2006, 2008, 2010, 2012 and 2014 respectively. Elderly (aged 65 and above) information was separated from aggregate data. The data were weighted for analysis.

After weighted the data, from 2003 to 2014, the rates of elderly hospitalization, early discharge and hospital avoidance revealed increasing, declining and declining changes, separately, which showed a liner trend (P<0.05). The weighted logistic regression analysis displayed that, after adjusted other factors, the factors which increased the hospitalization rates of elderly were the year of 2012, the year of 2014, chronic disease. The values of their Odds ratio (OR) were 2.596, 3.386, and 2.663, respectively. The factors which decreased early discharge rate of elderly were the year of 2008 and the year of 2012, whose values of OR were 0.219 and 0.090, respectively. The variables of chronic disease and male increased the rates of hospital avoidance, and the decreased factor was the year of 2010, whose values of OR were 9.713, 1.375, and 0.139, respectively.

As the NCMS policy improved, the utilization of in-hospital health services for the rural elderly increased gradually. The influence factors of elderly in-hospital were the changes of NCMS policy over years and chronic diseases.
A Model Training For Traditional Birth Attendances As Promoter Of Exclusive Breastfeeding At Ciampea District, Bogor Regency

Evi Martha
Evi Martha; Sinta Normala Sari; Nia Kurniasih
Faculty of Public Health, Universitas Indonesia
Indonesia
evimartha@gmail.com

Child Mortality Rate in Indonesia is still considered high. Exclusive Breastfeeding (EBF) for the first six months of baby’s life is one way that can be done to reduce IMR. The Indonesian government has set up exclusive breastfeeding practices in the Regulation No. 33 year 2012, but unfortunately the report shows that the proportion of exclusive breastfeeding is low. Government regulation is not the only way to reach successful EBF practice, while other people supports are also needed.

TBAs that have strong presence among mother, especially in rural community, have a great potential to support mother in EBF practice. Based on this situation, training for TBAs is an effort to improve their ability to encourage mothers to support and increase exclusive breastfeeding practice to her baby.

The objectives was to improve knowledge, attitude, and practice of TBAs in the promotion of Exclusive Breastfeeding in Ciampea, Bogor, Jawa Barat

Methods
Training program was held involving 55 TBAs as participants. Training methods included: lecture, EBF documentary film, vignette, story telling, role play, group discussion, testimony, pocket book, flipchart, and assistance. Univariate and bivariate analysis were used to measured the improvement

The study found a significant improvements in knowledge, attitude, and practice among TBAs in the promotion of EBF (p value 0,0005). The results indicated knowledge increased 2 times, attitude 1,5 times, and practice 2 times.
A Screening Study Of Asymptomatic Human T-Lymphotropic Virus Type-I (Htlv-1) Carriers And Establishement Of A Support System For Them In Ishigaki Island In Okinawa, Japan

Yukako Kaneshiro

1) Laboratory of Hematoimmunology, School of Health Sciences, Faculty of Medicine, University of the Ryukyus 2) Kariyushi Hospital

HTLV-1 is a causative factor in adult T-cell leukemia/lymphoma (ATL) and HTLV-1-associated myelopathy/tropical spastic paraparesis (HAM/TSP). Southwest Japan is the most endemic area of HTLV-1 in the world, and Central Africa and Central and South America are also known as endemic areas. The major routes of HTLV-1 infection are mother-to-child via breast-feeding and sexual transmission in long term partners/spouses. The lifetime risk of developing ATL and HAM/TSP are 5% and 0.25%, respectively. However, both diseases typically have a very poor prognosis, especially in ATL with median survival time of 8-10 months. Therefore, it is thought that the establishment of a prevention strategy of HTLV-1 infection is a quite important issue.

Okinawa prefecture, located in the southernmost and only subtropical area of Japan, is known as one of the endemic areas. However, the current status of HTLV-1 carriers in remote islands of Okinawa prefecture still remains to be clarified.

The purpose of this study is to clarify demographic characteristics of asymptomatic HTLV-1 carriers living in Ishigaki Island, one of the remote islands in Okinawa prefecture, Japan. Furthermore, to establish a basic support system for HTLV-1 carriers, we conducted interviews with newly diagnosed HTLV-1 carriers and evaluated their mental status.

Ishigaki Island, one of the remote islands of Okinawa prefecture, is located approximately 1,000 kms southwest of mainland of Japan. Yaeyama medical district including Ishigaki Island has about 52,438 people. Yaeyama district is comprised of 10 remote islands, and people who are living there utilize three major general hospitals in Ishigaki Island.

The present study conducted outpatient service and medical checks of healthy islanders at a Kariyushi Hospital from March to May in 2015. A screening test for anti-HTLV-1 antibody was done using the passive particle agglutination (PA) method. Subsequently, the HTLV-1 proviral load (PVL) of peripheral blood mononuclear cells (PBMCs) in carriers was quantified by real-time polymerase chain reactions (PCR). We also analyzed major anti-parasite antibodies such as strongyloides and toxoplasma by dot enzyme-linked immunoassay (ELISA) using the PA method.

Interviews with newly diagnosed HTLV-1 carriers were another method used to check the psychological state concerning HTLV-1. We called newly diagnosed HTLV-1 carriers to inform them of the results of the anti-HTLV-1 antibody test and ask them to revisit Kariyushi Hospital. After an
explanation about the disease information by a hematologic doctor in the specific outpatient clinic, nurses conducted counseling using the questionnaire method while also collecting the data.

This study was approved by the institutional ethics committees of University of the Ryukyus and Kariyushi Hospital in 2014. All participants provided written informed consent before participating in the study.

Total 633 subjects participated in our study, 557 of those were healthy residents of the island in the medical examination center and the other 76 were outpatients. Their characterizations were the following; gender, male: 412, female: 221; age group, median: 47 years, range: 17-93 years; and districts of birthplace, Yaeyama district including Ishigaki: 327, Miyako district: 64, Okinawa main island: 61, Kume island: 1, other prefectures: 144, overseas: 5, no data: 31. The data showed Ishigakis population has many migrants not only Okinawa main island but also other prefectures, or even countries.

As a result of the anti-HTLV-1 antibody screening test, 22 of all 633 participants (3.5%) were HTLV-1 carriers. The incidence of carriers was not different between male (3.4%) and female (3.6%). The highest prevalence of carriers was over 70 years of age (10.5%). There were no carriers in the age younger than 40 (189 participants). The rate of the carriers according to birthplace; Yaeyama district, Miyako district and Okinawa main island were 4.0%, 4.7%, and 4.9%, respectively. Focusing on Yaeyama district, a higher rate of carriers was observed in Kuroshima and Hateruma Island (25.0% and 15.4% respectively), even though the number of participants was small.

PVL was measured in a total of 21 HTLV-1 carriers, and the median PVL level was 2.2 copies / 100 PBMCs (range, 0.1-23.0 copies). The carriers with PVL <1 copy/ 100 PBMCs had no family history of ATL or HAM/TSP, parasitic infection, and they were not outpatients of internal medicine except one patient. Although one of the outpatients had an undetectable PVL level, she was suspected to have HAM/TSP. A sample with higher PVL (20 copies / 100 PBMCs) was subjected to a southern blot analysis, but we did not detect the monoclonal integration of HTLV-1 proviral in the DNA.

In the HTLV-1 carriers of Ishigaki, the prevalence of strongyloides and toxoplasma infection was 30% and 26.6%, respectively. Focusing on PVL, the carriers with PVL 4 copies /100 PBMCs had a higher prevalence of strongyloides or toxoplasma than the carriers with PVL<4 copies /100 PBMCs. In addition, one carrier was positive for antibodies triggered by five kinds of parasites.

The present study revealed demographic characteristics of HTLV-1 carriers in detail on Ishigaki Island in Okinawa prefecture for the first time. As expected from previous data, the carriers prevalence in Okinawas remote areas was high with about 4 % in each district. Moreover, it was suggested that many HTLV-1 carriers also had the subtropical zone related infections. We are proceeding with this study to establish a basic support system for HTLV-1 carriers and a prevention strategy of HTLV-1 infection in accordance with the specific characteristics of the remote islands in Okinawa prefecture.
A Study In The Bioactive Compounds, Papain And Alkaloids In Fijian Papaya (Carica Papaya) Leaf Extract

Dr Santha Muller
Santha Muller; Morgan Downes; Bilal Ahmed; Prasanna Waichal; Joslin Singh; Anish Singh
Medical Research Laboratory, Fiji National University
Fiji
santha.muller@fnu.ac.fj

Fiji is one of the countries in the Pacific region where a high level of dengue activity was observed and a long history of dealing with dengue since 1885. The papaya leaf juice has been a popular traditional medicine in Fiji for treating dengue fever patients as self-medication.

The aim and purpose of the study was to determine the constituents of the selected, potentially bioactive compounds papain an enzyme and alkaloids namely carpaine, pseudocarpaine and dehydrocarpaine I and II in Fijian Carica papaya leaf extract.

C. papaya leaf samples were collected from the commercial farm, washed, air dried and used either dry or wet for preliminary analysis with water and methanol using spectrophotometer. Quantitative analysis was carried out by using Shimadzu HPLC system. Standardization was obtained by performing water and methanol extracts with an injection volume of 1 to 10 ul in different mobile phases. Dilution of methanol was tried to deduce optimal conditions. Significant peaks were detected between 0 to 40 minutes retention time and used for the detection of papain and alkaloids to be compared with the standards. Papain was separated by using Nova-Pak C-18, 3.9 Å— 150 mm columns. 70% Acetonitrile was used as mobile phase. 10 µL injection volumes were used. Sample was analyzed at a wavelength of 230nm.

Retention time of one peak obtained from sample was similar to that of standard papain which was purchased from PHENOMENEX NZ LTD, as standard papain was run before running the sample. So the presence of papain in C. papaya leaf extract was confirmed. The data will be discussed based on the chromatographic analysis of papain. As standards for the alkaloid were unable to be sourced, a simple method using the dragendorff reagent was followed to detect the presence of alkaloid in the papaya leaf extract.
A Study On The Phenotypic Expression Of The Cd Makers On Lymphocytes In Hiv Positive Patients In Fiji

Santha Muller
Santha Muller; Atlesh Nand; Morgan Downes; Dashika Balak
Medical Research Laboratory, Fiji National University
Fiji
santha.muller@fnu.ac.fj

The increasing number of HIV/AIDS cases has become a national challenge for Fiji though it is classified as a low prevalence country with 610 confirmed cases from January 1989 to January 2015. CD4+ screening tests are routinely carried out to monitor the HIV disease course, clinical staging and initiation of ART regimen. Fiji as developing pacific country with limited resources, managed to monitor the CD4 positive T cells but not the CD8 and other co expressed markers on lymphocytes which will determine the progression and outlook of the disease and monitor the effectiveness of HIV treatment.

Thereby a prospective case control cohort study was initiated by the Medical Research Laboratory, Fiji National University introducing 4 flow cytometry technology (Accuri C6) to study the phenotypic expression of CD3+, CD4+, CD8+, CD45 +, CD54+ cells, CD4: CD8 ratio and the correlation of CD markers expressed during the proliferative stages of the T cell activation and immune regulation of HIV patients during the anti-retro viral treatment.

The study included 20 HIV positive patients confirmed by HIV rapid test at the Reproductive Health Clinic (RHC) and 20 controls who are HIV negative who attended the RHC. The whole blood test was performed by following no wash staining procedure, data acquired and analyzed by CFLOW plus software.

The absolute count and the percentages of CD markers between patient and control groups were compared. The significant results defined by P value will be discussed. The immune status of both the groups will be indicated by the CD4: CD8 ratio. As CD4 count is a routine test for screening and monitoring HIV patients by Alere counter at all the divisional hospitals with today’s advances in information technology, Medical Research Laboratory has brought an added advantage by introducing the 4 color flow cytometry to handle significant growth in communicable diseases such as HIV/AIDS in Fiji. The research efforts (first of its kind for the country) undertaken will enhance the research capacity building and clinical monitoring of HIV/AIDS patients for comprehensive management and patient care.
Acculturative Stress And Related Stressors As Risk Factors Of Depressive Symptoms Among Kazak Students From Xinjiang, China

Yayun Xu
Yayun Xu
Wuhan University
China
yayunwhu@163.com

Xinjiang Uygur Autonomous Region, located in the very west of China, has its minority students flow into the mainland for further education. However, because of the cultural difference, they might undergo adaption problems, which in turn could lead to acculturative stress and other psychological disorders.

The present study is devoted to explore the effects of acculturative stress and related stressors on depressive symptoms among Kazak students from Xinjiang who are studying in the mainland.

Four universities were selected through randomized cluster sampling, from which all Kazak students in their university foundation year were enrolled. Data was collected using anonymous questionnaire survey. Acculturative stress and depressive symptoms were measured with revised ASSIS and CESD-20 respectively. 298 (109 males and 189 females) valid questionnaires were received. One-way ANOVA, t test, bivariate correlation, multiple linear regression and logistic regression were used for data analysis.

The mean score of CESD-20 was 16.1±10.2 and 45.5% of the participants had a CESD-20 score of 16 or above. Females (17.1±10.1) reported higher score than males (14.3±10.2) (P=0.020). The mean score of acculturative stress was 69.0±19.6. The most severe stressor was reported as homesickness 14.0±3.5, followed with cultural competence 11.0±3.3, identity threat 9.1±3.4, self-confidence 9.1±3.4, opportunity deprivation 9.0±3.9, value conflict 8.8±3.6 and rejection 7.7±3.7. Multiple linear regression and Logistic regression demonstrated that acculturative stress and the seven stressors were independent risk factors for depressive symptoms. These findings suggest that Kazak students are at high risk of depression and acculturation related stressors should be integrated into students heath promotion programs to prevent depression.
Add (Alokasi Dana Desa) As Potential Source For Strengthening Program To Reduce Malnutrition In Community Level

Hendri Hartati
dini dachlia;mardiati nadjib
Center for Health Research University of Hendri Indonesia
emailhendri@yahoo.com

There are some projects focusing on effort to reduce and prevent low birth weight, childhood stunting, and malnourishment of children in certain areas in Indonesia. Most projects targeted villages in provinces where rates of stunting and low birth weight in infants and children up to two years old.

ADD or Alokasi Dana Desa, a local government support to improve community achievement for some indicators, can be considered as a potential source to support the efforts to achieve health program targets. Various initiatives of the Head of the Village to use the money were found in many districts. Many of them have already aware that improving spending quality is really matter, it can shows how the leadership at the village level has a strategic role to ensure access of the village people.

The aim of the paper is to 1) assess model how ADD could be used to finance health program activities, 2) explore model of payment for health worker and cadres work in malnutrition areas using ADD fund work at village level.

Method used was Review and document the experience with RBF (and related mechanisms), stakeholder meetings particularly at the local level. Lesson Learned the ADD used in community program was explored and used as the basis to develop model to finance scheme that consider strength and challenges, local context and policies. Sampled villages were selected from Nusa Tenggara Barat. The study was done in 2013.

In Nusa Tenggara Barat, the Head of the Village used the funds to support health care provision for the people. They can easily come to the health center for free. For pregnant mothers and malnutrition cases, cadres are expected to help to seek ANC to the Midwife services and improve nutrition status of the Baby and toddlers. The existing system do not involve such a initiative to give incentives to the providers to improve performances.However, it can be modified to integrate the performance-based incentives to the existing ADD scheme. Legal Feasibility: Under decentralization reform, more specific as written in the law (UU No.32 Tahun 2004) the role and function of the central government is given to the local government. According to PP No.37/2007 village level obtain fund to implement activities to fulfil its role. Fund allocation addressed to community empowerment, health issues. Source of fund is Local budget or APBD. There are some relevant regulations such as PP No.27/2005 about Village Government Affairs, SK Menteri dalam Negeri No. 140/640SJ/2005 about Guidance of Village Funding Allocation, and Permendagri No.37 Tahun 2007 about Guidance to village funding management. Local government sometimes regulate details and amount of ADD in their local regulation. Proposed activities for ADD proposed by village meeting
(Musyawarah Perencanaan dan Pembangunan Desa) that proposed each fiscal year. Organizational Feasibility: According to the regulations principles of management of ADD is transparent, accountable, participative, follow the rules, discipline, effective allocation and controlled. Monitoring and Evaluation: Reporting and accountability of ADD integrated with reporting and accountability APBDes (Village level local budget). Supervision of the implementation of ADD according to scheduled supervision from government according to the regulation. Payment Scheme: ADD derived from APBD which sourced from central and local financial received by 10%. Distribution and disbursement mechanisms ADD implemented using financial assistance expenditure. Proposed Model Using ADD Approach: The ADD scheme is potential to be used as the basis for our RBF model. The implementation will be at the village level, combined with the PNPM GSC program that has been implemented in many provinces. Challenges for payment scheme is low flexibility to use the government fund to respond the good performance, it will need local governments commitment as well as head of the village innovation to support the RBF. The strenght of the ADD approach to be used for RBF is the relatively easy cooperation between cadres, health center staffs/ midwife, and PNPM GSC, while head of the village could closely monitor the progress and even motivate all assigned staffs and cadres to work together hand-in-hand to achieve the targets. It should consider to develop model with encourage and empower the community to bring the health issues or activities as part of the ADD funded program, provide stimulant fund (top-up or even additional) including incentive for cadre to improve nutrition status of the community, or even incentive for health personnel and Combine this approach at village level with PNPM GSC and RBF with district level model.
An Audit Of Maternal And Neonatal Deaths In A Low Resource Setting In Indonesia: Results Of Analysis Over Three Years

Yuli Butu
Yuli Butu (1); Asnawi Abdullah (1,2); Krishna Hort (1,3); Louise Simpson (1)
Australia Indonesia Partnership for Maternal and Neonatal Health (AIPMNH), Kupang, NTT (1); Department of Biostatistics and Population Health, Faculty of Public Health, University Muhammadiyah Aceh, Banda Aceh, Indonesia (2); Indonesia; Nossal Institute Indonesia
Asnawi.Abdullah@fkm.unmuha.ac.id

Maternal and neonatal deaths in developing countries continues to be an urgent global problem. Indonesia has not been immune from this global trend, with national neonatal mortality rates falling by only 3% annually between 1990 and 2012, and the maternal mortality rate not on track to achieve the MDG 5 target. An important aspect of addressing high maternal and neonatal mortality is collecting and analysing data on the occurrence and causes of death. In countries where reporting of vital events is incomplete, such as in Indonesia, audits of reported deaths provide a method of collecting data on factors associated with death, and possible causes.

NTT is one of the poorest of Indonesia’s 34 provinces and consists of a number of islands widely separated by sea, with high levels of poverty, and under-nutrition. With the assistance of the the Australia-Indonesia Partnership for Maternal and Neonatal Health (AIPMNH), the local governments of NTT have initiated a program to reduce maternal and neonatal mortality. As part of this program, regular audits of all reported maternal and neonatal deaths were conducted over the period 2012-2014.

Identify risk factors for maternal and neonatal death from the information collected through audits of all maternal and neonatal deaths reported to health facilities in 14 districts of NTT province over the period 2012-2014.

Health workers stationed at village level (village midwives), and health workers in community health centres (Puskesmas) and district hospitals, report all cases of maternal and neonatal death to the district health office in each district. This includes all deaths occurring in health facilities; as well as deaths occurring at home that are reported by families to health facilities, or identified by village level health workers on follow up of pregnant women registered in the register of pregnant women kept in each village and Puskesmas.

Information collected on all maternal and neonatal death reported over the 3 years 2012 to 2014 was analysed. The analysis explored trends and compared cases of maternal and neonatal death by a number of epidemiological factors including comparison by place of birth delivery/death, provider assisted delivery at birth/death, date of birth delivery/death, weight at birth, age of death, maternal parity, gravida, ante-natal care, and the possible causes of death. Where appropriate, relative risk of death was calculated for comparison of risk factors.

This study analyzed data from 357 maternal and 2246 neonatal deaths reported over the period 2012-2014 in 14 NTT districts. The absolute number of reported maternal and neonatal deaths is
equivalent to maternal and neonatal mortality rates of 156 per 100,000 and 10 per 1000 live births respectively. The neonatal rate is likely to be an under estimate of the actual rate, as it is less than 50% of the estimated neonatal mortality rate of 26/1000 live births for the province of NTT in the 2012 Demographic and Health Survey. Lack of reporting of neonatal deaths occurring at home together with poor application of criteria for a neonatal death are possibly responsible. It is thought however that almost all maternal deaths are now being reported with the exception of those occurring in very remote areas.

Overall, there was a marginal decrease in the absolute number of reported cases of maternal deaths over the period 2012 to 2014 although this was not uniform across districts, with approximately 50% of reported maternal deaths being from just three districts. Maternal deaths were also not uniformly distributed between Puskesmas, as approximately 30% of Puskesmas accounted for all maternal deaths. While a relatively small proportion of women still deliver at home, these contribute almost half of the maternal deaths and most die at home (i.e, they are never referred). Innovative methods are therefore required to persuade this minority of women to deliver in health facilities. This recommendation is supported by the finding that women who delivered outside a health facility had 2.5 - 2.8 times the risk of dying compared to women that delivered in a facility; and women who delivered with a non-medically trained attendant had 2.05 - 2.4 times the risk of dying as women who delivered with a medically trained attendant.

The number of reported neonatal deaths decreased in 2013 and 2014 after some increase from 2011 to 2012. However, the decrease was not uniform across districts and there were increases in some districts. This year-to-year fluctuation in the number of neonatal deaths at both district and Puskesmas level, suggests reporting anomalies. The distribution of neonatal deaths among sub-districts was also not uniform, with half of neonatal deaths contributed by only 48-57 out of 348 Puskesmas. The majority (83%) of neonatal deaths occurred in the first week of life and 28% of these in the first 24 hours of birth. Of the deaths, a large proportion (>50%) were low birth weight. This data suggest a need for more attention and better targeting of interventions in this early period to reduce the number of neonatal deaths in NTT.
An Independent Monitoring Of Radioactivity Of Seawater With Local Fisheries Affected By Tsunami : Surviving Multiple Disasters In Fukushima

Yukako Komasa
Yukako Komasa; Shinzo Kimura
Dokkyo Medical University
Japan
yukakokomasa@gmail.com

There is still a global concern on the damage and its recovery works of the Fukushima Daiichi Nuclear Power Plant (FDNPP), which undergone three massive hydrogen explosions of its reactors following the magnitude 9.0 earthquake and tsunami that hit the Tohoku region of Japan on March 11, 2011.

Water including radioactive substances temporarily released from the plant several times by technical reasons of recovery works and the rainfalls, and this is a major concern for local fisheries, which were extremely damaged by Tsunami and lost their works, still even imposing themselves voluntary ban of fish catches within 20km radius from the plant.

There is less information on the level of contamination and its effect caused by water release from the plant, and may lead to sense of anxiety on local sea products, more information on the situation of ocean is needed.

The purpose of this study is to investigate and assess the contamination of seawater around FDNPP by oceanographic surveys as a third party body. To make a prediction on the transition of contamination, we made second sampling at the same place, a year after the first sampling.

Oceanographic investigations were conducted twice within 1.0 km radius of the FDNPP on September 19, 2013 and October 20, 2014. Assistance and permission were obtained from a local Fishery Cooperative and, for security reasons, the Japan Coast Guard.

Samples of seawater and seafloor sand were collected at three locations: 1) near the sewage outlets north of the plant (F-1), 2) at the approach of the plant harbor surrounded by breakwaters (F-2), and 3) at another sewage outlet south of the plant (F-3). Water depth was 3.3m at F-1, 9.0m at F-2, 3.5m at F-3.

Water samples were collected at 1.5m below the sea surface. Besides, dose at the seafloor and its spectrum of radioactivity was measured when sampling the seafloor sand, by a gamma spectroscopy developed for underwater measurement. Measurement time for dose and spectrum was 300 seconds.

Water samples and sand samples were analyzed by germanium semiconductor detector (GMX30-70-LB-B-HI, ORTEC) to measure the level of gamma-ray emitting radionuclides, with measuring time of 86,400 seconds for seawater and 28,800 seconds for dried seafloor sand.

Radioactivity concentrations of cesium-134 and cesium-137 (Bq/L) in the seawater samples taken on September 19, 2013 were, 1) 0.0821±0.0160 and 0.1848±0.0185 (F-1), 2) 1.154±0.032 and
2.553±0.045 (F-2), 3) 0.1989±0.0198 and 0.529±0.024 (F-3). The seawater samples of October 20, 2014 were, 4) ND (non-detected) and 0.086±0.020 (F-1), 5) 0.276±0.019 and 0.789±0.030 (F-2), 6) ND and 0.096±0.020 (F-3).

Whereas all samples contained cesium-134 and cesium-137 at detectable level in 2013, cesium 134 was under detectable levels in front of sewage outlets (F-1 and F-3) in 2014. The levels of contamination in water were the highest at the point F-2 in both years. Radioactivity profiles for three samples in both years presented similar patterns.

Radioactivity concentration of cesium-134 and cesium-137 in the seafloor sand samples were taken on September 19, 2013 were, 1) 376.2±3.2 and 841.7±4.9 (F-1), 2) 1161.2±8.2 and 3596.2±12.5 (F-2), 3) 239.0±2.8 and 550.8±4.3 (F-3). The seafloor samples of October 20, 2014 were, 4) 154.46±1.93 and 473.4±3.4 (F-1), 5) 328.9±2.9 and 1016.2±5.3 (F-2), 6) 116.69±1.70 and 354.2±3.0 (F-3).

The highest concentrations of cesium-134 and cesium-137 were found at F-2 in both years. The levels of contamination were almost consistent with the result of water samples taken at the same sampling points.

The level of seawater radioactivity did not show evidence resulting in an immediate harm to the health of the people in both year, and declines of the levels were found at all sampling points in the year 2014. However, one of the potential concerns is that the level of radioactivity concentration was the highest level at F-2 for cesium-134 and cesium-137. Although F-2 is in front of the harbor, which was declared as completely sealed (thus no lead to the open water) by the Government in September 2013, the harbor gateway is not closed for passage and, the seawater in the harbor is exchanged with outside seawater every day according to an estimate. In addition, sedimentation of high levels of radionuclides to the seafloor was suggested from the results of seafloor sand.

One of the legal loopholes of current Japanese regulation on releasing radioactive substances is that radioactive substances are considered a danger if and only they exceed the regulatory limit for both volume and concentration. In this sense, the level of radioactivity concentration may be attenuated although released at high level. Further monitoring to check the concentration at various distances from the harbor gateway should be needed.
An Interventional Behaviour Change Communication Programme For Improving Infant And Young Child Feeding In A Rural Community Of Kerala, India

Aswathy S
Aswathy S; Panicker KN; Rajani G; Leelamoni K
Amrita Institute of Medical sciences, Kochi, Kerala, India
India
draswathygopan@gmail.com

Poor child nutrition is known to be associated with poor survival outcomes and poor long term outcomes on cognitive and social development. Poor infant and young child nutrition practices are an important contributor to poor nutrition in many countries. The period between conception and two years (1000 days) is the critical period during which interventions to improve nutrition are most likely to be effective. Therefore targeting the period of conception and the first two-three years of life of the child is very important. Infant and young child feeding is also intimately related to cultural and behavioral norms of a region. Hence it is necessary to have a behavior change communication program targeting antenatal mothers, mothers of under-three children and their key influencers in the family.

To assess the awareness and practice of infant and young child feeding (including exclusive breastfeeding) among mothers of under three children and antenatal women.

A self administration unit (Njarakkal) of Ernakulam dist, Kerala, India with a population of 22596 which is also the practice area of the Dept. of Community Medicine, Amrita School of Medicine was taken for the study. The minimum sample size was calculated to be 8-96 according to child feeding practices reported in DLHS with 20% precision and 95% confidence interval. 12 of the 16 wards in the unit were randomly selected. A baseline survey was undertaken among all the listed, available antenatal and under three mothers numbering 361 and 63 respectively in the 12 wards. Informed consent was obtained from the study subjects prior to the study. A planned behavior change communication programme was designed and carried out in the study period from November 2011- December 2012.

Intervention were conducted in close coordination with local ICDS units. The ICDS unit workers were given intensive training on counseling, communication and IYCF practices. The intervention consisted of mothers and influencers meetings, home visits by ICDS unit workers, individual and group counseling. mothers meeting and group counseling sessions were monitored by observers with a check list consisting of communication modalities, content management with the use of flip charts, flash card etc. The content covered included, diet during pregnancy and lactation, initiation of breast feeding within 1 hr, exclusive breast feeding, 1000 day concept, breast feeding position and attachment, expressed breast milk, complementary feeding. Intensified awareness campaigns followed through street play, folk art etc to reinforce the concepts of infant and young child feeding.

The mean age of the respondents was 27.42 yrs ± 4.53 and more than half of the study population had at least 8 years of schooling. The socio-demographic profile of the study population at baseline
and end line were comparable with no significant differences. Breast feeding awareness in terms of initiation within 1 hr, exclusive Breast feeding, 1000 day concept, breast feeding options for a working mother, ill effects of bottle feeding and commercial feeding increased significantly by 18%, 5.2%, 20%, 22.2%, 12.6%, 7% respectively. This was reflected in practice also with an increase in mothers who had initiated breast feeding within 1 hr, exclusively breast fed for 6 months, a decrease in episodes of acute diarrheal diseases though not significant. Whereas, there was a significant decline in bottle fed under three children (p=.016) and pre-lacteal feeds (p=.03). As expected, a significant association was found between awareness of exclusive breast feeding and its practice (p<0.05) as also awareness regarding breast feeding initiation and its practice. Among the antenatal women, modification in diet such as inclusion of green leafy vegetables and pulses showed an increase from 4.9% to 22.2% and 8.2% to 16.7% respectively. All the antenatal women reported having consumed Iron and Calcium tablets on the day before at end line compared to 97% at baseline. Data on influencers will be presented elsewhere.

The percentage of children given pre-lacteal feeds at baseline was 29% close to 33% observed in another South Indian study (Nitin et al., J of Fam Med & Primary care, 2013). Exclusive breast feeding was reported among 55.5% of the study children in comparison to 13.6% in the northern part of India (Apurba et al., J health Popul Nutr, 2010). A n interventional study with the help of mothers support groups carried out for a longer period of time observed a significant increase in initiation of breastfeeding from 11% to 71% at 2 years, exclusive breast feeding from 7% to 50%, decline in prelacteal feeds from 77% to 15% (Kushwaha et al., PLOS, Nov 2014). In comparison, the increase in initiation in breast feeding, exclusive breast feeding and fall in pre lacteal feeds have been incremental in this study due perhaps to the shorter duration of the study.

The study has demonstrated the usefulness of community based behaviour change programmes in improving IYCF awareness and has also begun to impact practice. Though, longer follow up studies are necessary to determine sustainable impact on practice.

Acknowledgement: The authors are thankful for the small scale funding provided by UNICEF (India, Kerala and Tamil Nadu office) vide 826-RCH-Ker for the conduct of the study.
Analysis Of Concentration And Composition Of Pm2.5 Exposure Among Traffic Policeman In Jakarta

Doni Hikmat Ramdhan
Doni Hikmat Ramdhan; Eka Fitriani Ahmad
Faculty of Public Health Universitas Indonesia
Indonesia
donihr_05@yahoo.com

The main pollutants of air pollutants on the highway is the emission of particulates, hydrocarbons, sulfur and nitrogen oxides (SOx and NOx) have been reported to cause health problems. The high level of air pollution in the road such as PM2.5 and other pollutants as well as many harmful health effects are not realized by many parties demanded an accurate data about concentration and composition of PM2.5 exposure among traffic policemen.

This study is aimed to determine the concentration and composition of particulate matter exposure of traffic policeman.

The gravimetry method was used to determine the concentration of particulates and refractorimeter and EDXRF analysis to determine the composition contained in the particulates which exposed traffic police.

This study showed that the PM2.5 concentration of traffic policeman personal exposure was not exceeded the OSHA or ACGIH standard but have exceeded the daily quality 65 μg/m3 based on PP 41, 1999, 65 μg/m3 based on USPA and 25 μg/m3 based on WHO. For the composition of black carbon and metal elements have not exceeded the standard quality 300 μg/m3. But concentration Pb in particulate matter with a concentration of 0.28 μg / m3 which has exceeded the value of the quality standard USEPA.
VIA (Visual Inspection with Acetic acid) is one of the alternative methods of cervical cancer screening by acetic acid application. Uterine cancer or cervical cancer is a disease that kills more women. Every year there are 15 thousand women were registered as cervical cancer patient. The combined data from several hospitals in Indonesia among all types of cancer, cervical cancer showed the highest frequency is 16.0%, followed by the liver / hepatoma (12.0%), breast (10.0%), lung (9.0 %), skin (7.5%), nasofarings (7.0%), gland lymph (6.0% /, leukemia (5.0%), colon (4.5%) and others (1 , 7%). The number of cases of cervical cancer in Indonesia is getting worse because more than 70% of cases that come to the hospital are at an advanced stage.

The aim of this study was to analyze the relationship between early detection factors (predisposing factors, supporting factors, driving factors) with the VIA inspection (Visual Inspection with Acetic Acid) at the Health Center Kenjeran and Balongsari in Surabaya.

This research was conducted using the cross sectional analytic approach. The samples were 80 Child Bearing Age Woman who met from PHC Balongsari and PHC Kenjeran, extracted with multistage random sampling technique. The independent variables were the knowledge, the attitude, the motivation, the perception of women, socio economic level, and time. Dependent variable was VIA behavior. The data were collected by using questionnaires.

The results showed there were significant relationship between knowledge and examination VIA of Child Bearing Age Woman (p = 0.002 < 0.05), significant relationship between attitude and examination VIA of child Bearing Age Woman (p = 0.000 < 0.05), significant relationship between motivations and examination VIA of Child Bearing Age Woman (p = 0.000), significant relationship between perception and examination VIA of Child Bearing Age Woman (p = 0.000 < 0.05), significant relationship between socio economic level and examination VIA of Child Bearing Age Woman (p = 0.000 <0.005), significant relationship between time and examination VIA of Child Bearing Age Woman (p = 0.009 < 0.05).The researcher recommends health workers to improving the knowledge of women on examination VIA. This can be done by increasing the flow of information through health centers, private practice of physicians, midwife private practice, electronic media and health educations.
Incidence of diarrhea among under-five children in Indonesia is 6.7% (Riskesdas, 2013). Diarrhea is one of the main causes of infant and under-five children death (31.4% and 25.2% respectively) (Riskesdas 2007). Coverage of the use of both oral rehydration salts (ORS) (33.3%) and zinc (16.9%) among under-five children in Indonesia is still quite low, whereas ORS and zinc can provide benefits to overcome dehydration, reduce the severity and shorten the duration of illness and prevent the occurrence of recurrent diarrhea until the next 2-3 months when consumed as prescribed.

The objective of the study was to identify factors affecting ORS and zinc usage among under-five children diarrhea.

The study utilized data from Basic Health Survey (Riskesdas) 2013 and selected 6201 sample mothers with under-five children suffering from diarrhea during the last month. Data were then analyzed by multiple logistic regression.

Prevalence of ORS and zinc usage was 10.9%. People who are in the middle social economic level (quartil 3) (POR 1.344; 95%CI 1.011-1.785) and living in urban area (POR 1.22; 95%CI 1.019-1.465) had higher risk to use ORS and zinc. Otherwise under 6 months infants having lower risk to use ORS and zinc during diarrhea (POR 0.634; 95%CI 0.403-0.996). ORS and zinc promotion should be comprehensively inserted in the theme of postnatal care in order to give the well-informed education of ORS and zinc for diarrheal medication.
Anthropometric Measurements For Detecting Low Birth Weight

Wahyu Kurnia Y Putra

Kusharisupeni; Wahyu Kurnia Y Putra; Engkus Kusdinar Achmad
Faculty of Public Health
Indonesia
wahyu0286@gmail.com

In several provinces of Eastern Indonesia, the majority of births take place at home (60%) and are assisted by traditional birth attendants. Most of these newborns do not have their birth weight recorded, due to lack of available weighing scales or lack of skill to perform the measurement, especially in rural areas. As such, an early identification of low birth weight cases is needed to prevent infant morbidity and mortality.

To assess anthropometric measurements including calf, chest, and head circumferences as a method for detecting low birth weight, as substitute for actual weighing.

This cross-sectional study was performed at Banjar Baru, South Kalimantan Province, Indonesia from January to March 2012. Subjects were full term, singleton, and live-born infants during the study period, and obtained from private clinics by a purposive sampling procedure. Calf, chest and head circumference were measured to identify the most suitable substitute for detecting low birth weight using Pearson's correlation, ROC, sensitivity and specificity.

In this study, a correlation was shown between birth weight and all anthropometric measurements. Optimal calf, chest and head circumference cutoff points to identify low birth weight infants were 10.3 cm, 30.7 cm and 31.2 cm, respectively. The area under curves (AUC) showed good accuracy for all measurement types. Calf circumference had the closest estimated true prevalence to the prevalence (8.52% and 8.6%, respectively) compared to the other measurement types.
Association Between Smoking And Lung Cancer In Inpatient And Outpatient At Dr. Cipto Mangunkusumo Hospital Jakarta 2011-2012

Salsabila Benazir, SKM
Salsabila Benazir, SKM; dr. Yovsyah, M.Kes
Universitas Indonesia
Indonesia
salsabila.benazir@gmail.com

Lung cancer is one of the highest incidence and mortality due to cancer and the risk factors unknown certainly. There is increasing lung cancer cases from 124 to 141 cases during 2011-2012 at Dr. Cipto Mangunkusumo Hospital (RSCM) Jakarta.

This study aims to determine association between smoking and lung cancer in Inpatient and Outpatient.

This study was case-control study with 75 cases and 75 controls. The study case were patients who are undergoing inpatient and outpatient at pulmonologi RSCM Jakarta 2011-2012 and diagnosed with lung cancer. The study control were patients who are undergoing inpatient and outpatient at pulmonologi RSCM and not diagnosed with lung cancer according to ICD 10 code recorded in the medical record.

Result of bivariate analysis showed association between smoking status (OR 3.19, 95% CI = 1.63 to 2.23) , number of cigarette smoked (OR 7.62, 95% CI = 2.00 to 28.97), and duration of smoking (OR 3.87, 95% CI = 1.89 to 7.91 ) with lung cancer . It could be concluded smoking status, number of cigarette smoked and duration of smoking were strong related to lung cancer case.
Association Between Atopy And Severity Of Drug Eruption In Cipto Mangunkusumo Hospital, Jakarta

dr. Azzahrazade
dr. Azzahrazade
Faculty of Public Health, Universitas Indonesia
Indonesia
zahrazade@yahoo.com

An adverse reaction to a drug has been defined as any noxious or unintended reaction to a drug that is administered in standard doses by the proper route for the purpose of prophylaxis, diagnosis, or treatment. Cutaneous drug eruptions (CADR) are one of the most common types of adverse reaction to drug therapy. Although most drug-related skin eruptions are not serious, some are severe and potentially life-threatening. Atopy is a genetic predisposition towards the development of hypersensitivity reactions against environmental antigens. It means people with atopy are more likely to develop allergic reaction.

This study evaluated the role of atopy as risk factors for developing drug eruptions.

A cohort retrospective study on drug eruption was conducted during 5 years period (2004-2008) with special interest on clinical type of lesion and its severity. The most prominent clinical type shown from 691 patients were maculopapular eruption, Fixed Drug Eruption (FDE), Stevens-Johnson Syndrome and Toxic Epidermal Necrosis (SSJ-NET), erythroderma, and erythema multiforme. The collected data was examined by using Chi-Square.

137 patients history of atopy were unknown, so they were determined as missing values. There were 282 patients (50.9%) with history of atopy, and 78 of them (27.6%) had severe drug eruption. 272 patients had no history of atopy, and 96 of them 35.2% had severe drug eruption. The p value in this research is 0.53; therefore the role of atopy is not associated with severity of drug eruption.
Association Between Individual Psychological And Work Psychosocial Factors With Self-Reported Musculoskeletal Pain Among Secondary School Teachers In Pulau Pinang, Malaysia

Eva Nabiha binti Zamri
Eva Nabiha binti Zamri; Victor Hoe Chee Wai bin Abdullah; Foong Ming Moy
University of Malaya
Malaysia
evazamri@gmail.com

Musculoskeletal pain (MSP) is common among working population. Previous studies focused on work related psychosocial factors in the development of MSP. However, some recent evidences showed individual psychological factors might play an important role in the development of MSP.

Goals: This study aimed to assess the prevalence of MSP and to evaluate the association between individual psychological and work related psychosocial factors of MSP among secondary school teachers.

This was a cross-sectional study conducted in Pulau Pinang, Malaysia in 2014. The sampling method used was a two stage sampling to recruit the participants. Information on individual factors (socio-demographic, anthropometric measurements, health related behaviours, psychological symptoms, morbidities and mental health), work related factors (working background and psychosocial) and pain sites (low back pain (LBP) and neck and/or shoulder pain (NSP)) in the past 12 months was collected using a self-administered questionnaire.

A total of 1482 teachers, (response rate 91%) were recruited. The prevalence of self-reported LBP and NSP in the past 12 months was 48.1% (95% Confidence Interval (CI): 45.2% - 50.9%) and 60.2% (95% CI: 57.4% - 62.9%) respectively. From the multivariate analysis, there were significant associations between individual psychological and work psychosocial factors with self-reported LBP and NSP. Self-reported LBP was associated with teachers who reported severe to extremely level of depression (Prevalence ratio (PR): 1.73, 95% CI: 1.28 - 2.33), severe to extremely severe anxiety (1.45, 1.21 - 1.73), high psychological job demand (1.29, 1.06 - 1.57), low skill discretion (1.28, 1.13 - 1.47), and lower mental health (0.98, 0.97 - 0.99). Meanwhile, self-reported NSP demonstrated an association with reported mild to moderate anxiety (1.18, 1.06 - 1.33), severe to extremely severe anxiety (1.27, 1.11 - 1.45), low supervisory support (1.14, 1.03 - 1.25) and lower mental health (0.98, 0.97 - 0.99). Despite the difference in associated factors between different pain sites, our results suggested that individual psychological factors had stronger association with self-reported LBP and NSP; compared to work related psychosocial factors.

LBP and NSP were common among secondary school teachers. Intervention programs need to target on individual psychological and work related psychosocial factors in the occurrence of MSP. Intervention programs need to target on individual psychological and work related psychosocial factors in the occurrence of MSP.
Association Between Obesity And Hypertension In Karimun District, Province Of Riau Islands In 2014

Dwi Gayatri
Novarita; Dwi Gayatri
Faculty of Public Health Universitas Indonesia
Indonesia
dgayatri@yahoo.com

Globally, hypertension is still major public health problems. It revealed none of physical signs of high BP (the silent killer). 50% of hypertension patients didn’t realize they had high BP that is worsening the condition because they didn’t gradually changed their behaviors and avoided risk factors. Hypertension contributes to mortality rate of CHD, stroke, early death, and disability. In 2008, it acted over than 45% death of CHD and 51% mortality of stroke. Prevalence of hypertension in Indonesia (2007) was 31.7%. 76% was undiagnosed hypertension and didn’t have proper treatment. Karimun had 36.5% prevalence of hypertension included as the high-leveled hypertension district group compared to province and national level. Prevalence of obesity (11.3%) was also sky-scraping compare to national level (10.3%). IMT had direct correlation to BP and 20%-33% of hypertension patient was also overweight. The risk of obesity obtained hypertension is 5 times higher than those with normal weight.

To identify magnitude of problem on hypertension and obesity as well as to analyze the association between obesity and hypertension in Karimun District, Province of Riau Islands in 2014

The study used a cross-sectional design study and primary data source. The eligible sample was inhabitants of 18 years of aged and above that lived in Karimun District and visited one of six selected health centers in April 2014. Hypertension is the outcome variable whilst obesity acts as the independent variable. We analyze 355 eligible subjects through systematic random sampling and logistic regression.

The blood pressure (both systolic and diastolic) in this study increases at the level of age, yet it remains similar to aged group > 51 years old. Prevalence of hypertension in Karimun District is 40.3% and 21% of them is undiagnosed hypertension. The obesity prevalence is 26.8%. Obese respondent (IMT>27 kg/m2) has risk 1.86 higher to be hypertension than those who are not obese (95%CI 1.47-2.36). The increasing of hypertension must be followed with effective hypertension preventive program up i.e. maximizing the pospindu NCD and strengthening the community empowerment in NCD prevention.
Association Between Pneumonia Hospitalizations And Meteorological Variables In Hong Kong

William B Goggins
Holly CY Lam; Emily YY Chan; William B Goggins
The Chinese University of Hong Kong
Hong Kong
wgoggins@cuhk.edu.hk

Pneumonia is a leading cause of morbidity and mortality in Hong Kong, and around the world. Previous studies have found strong associations between meteorological conditions and respiratory hospitalizations and deaths but few studies have looked at associations for separate respiratory diseases.

In this time-series study we examine the association between pneumonia hospitalizations and meteorological variables using data on pneumonia admissions to public hospitals in Hong Kong for the period from 2002-2011.

Generalized additive quasi-Poisson regression models were used to regress daily pneumonia admissions to public hospitals in Hong Kong from 2002-2011 on the daily means of temperature, relative humidity, wind speed, solar radiation and pollutants, adjusting for long-term trend, seasonality, day of the week, and holidays, while allowing for non-linear associations and lagged effects.

In the hot season (May-October) higher temperatures, and higher humidity were significantly associated, with lagged effects persisting to about 6 weeks, with more pneumonia admissions, with relative risks (95% confidence intervals (CI)) of 1.38 (1.22, 1.57) for 30 vs. 27 and 1.35 (1.12, 1.63) for 94% vs. 80%, respectively. Higher levels of particulate matter with diameter 10 micrometers (PM10) was modestly associated with more admissions. These associations were stronger among children than among adults or the elderly. In the cool season (November-April) colder temperatures and lower humidity were associated with more admissions with RR (95% CI) = 1.22 (1.11, 1.33) for 12 vs. 22 and 1.09 (1.00, 1.19) for 49% vs. 83%, respectively, while higher PM10 and ozone were also associated with more admissions, however for children colder temperatures were associated with fewer admissions. Pneumonia admissions in this sub-tropical city are sensitive to environmental conditions, particularly high temperatures and humidity. This could be due to both weakened immunity of the host and better survival of the pathogen under certain conditions. People at risk for pneumonia, particularly children, should avoid exposure to adverse conditions.
Association Of Individual, Environmental, And Computer Factors With Computer Vision Syndrome (CVS) Among Computer Engineering Student In Jakarta

Dr. drg. Ririn Arminsih Wulandari, M.Kes
Nurul Maretia Rahmayanti, S.KM; Dr. drg. Ririn Arminsih Wulandari, M.Kes
Faculty of Public Health, Universitas Indonesia
Indonesia
maretianurul@gmail.com

Computer Vision Syndrome (CVS) is ocular and extraocular symptoms caused by individual, environmental, and computer factors which decreases work productivity. CVS has the highest incidence of occupational health problem worldwide. Students of informatics and computer engineering major are included the population at risk of CVS, caused by high exposure of the risk factors.

This study aims to determine the association between individual factors (age, gender, work position, sight angle, distance angle, duration of work, break pattern, and the use of glasses), environmental (lighting, temperature, and humidity), and computer factors (computer type, monitor type, electromagnetic radiation intensity, the use of antiglare screen, and monitor polarity) with incidence of CVS among students in Informatics and Computer Engineering major, Politeknik Negeri Jakarta 2015.

This study uses cross-sectional study design and primary data with sample of 100 students. CVS is determined by the occurrence of at least three from five symptoms consist of eye strain, dry eye, headache, neck pain, and blurred eyes.

Result of bivariate analysis shows that variable which significantly associated with CVS incidence among students are gender (4.09;1.41-11.90), duration of work outside class (0.32;0.14-0.76), lighting intensity (8.75;1.26-60.59), and electromagnetic radiation intensity (2.54;1.09-5.92). The most dominant factor associated with the occurrence of CVS is lighting intensity. Occupational and Environmental Health and Safety implementation is needed to reduce the incidence of CVS.
Pesticides are chemicals that used to control or destroy pests and diseases of plants. Previous research has suggested that pesticide has affected to decrease cholinesterase enzyme levels in women childbearing age in the area of agriculture. Agriculture in the brebes district was involving men and women in it. So that, there should be a special study of the (WUS) who works as a farmer.

This study purposed to determine the correlation between behavior and exposure to pesticides on cholinesterase enzyme levels in the blood of farmers women in childbearing age in Kedunguter village.

This research was used cross-sectional study. the total sample are 94 respondents, they are all farmer women childbearing age. Data were collected using random sampling techniques. study sites in Kedunguter Village of Brebes Sub-district in march 2015. Sampling in this study conducted observations and interviews on farmer women in childbearing age. While the cholinesterase test using Tintometer kit Lovibond. Data analyzed using chi-square test with alternative Fisher test and multivariate analysis using multiple logistic regression.

Results in this study showed a significant correlation between work time, use of gloves, hand washing behavior with cholinesterase activity on Farmer Women of Childbearing Age. Farmers women of childbearing age were advised not to work more than 6 hours per day because work time is the most influential variable on the cholinesterase activity (OR: 14.072).
Evidence on the associations between multimorbidity and quality of life (QoL) is well established. This study further investigated details on whether the patterns of association differ by age groups.

19664 observations from 10728 individuals aged over 30 were driven from 3 waves of Korean Health Panel between 2010 and 2012. 61 disease groups were defined based on Chronic Conditions Classification and total score for QoL (Euro-QoL 5D) ranged between 5 and 25. Multivariate associations between multimorbidity and QoL were modeled over t-1 and t year with adjustments for covariates by fitting generalized estimating equation.

Associations between multimorbidity and QoL were found in both younger age and older age groups: a 1 larger number of multimorbidity was associated with 0.20 and 0.22 increases of total QoL score for younger and older groups. Further, the gradient of effects over five categories of multimorbidity (0, 1, 2, 3-4, and 5) was steeper among older group. Estimates were 0.17, 0.42, 0.62, and 1.18 for each category increase compared to no disease category among younger group, while corresponding values were 0.35, 0.52, 0.85, and 1.28 among the older group.

This study suggests that, besides the fact that elderly people tend to have more multimorbidity, the effects of multimorbidity were more destructive among elderly people.
Associations Between Multiple Health Risk Behaviors And Mental Health Among Chinese College Students

Xin Li
Xin Li; Longbiao Cai; Fangrong Xu; Qiqiang He
Wuhan University
People’s Republic of China
826866476@qq.com

Although there is substantial evidence that health risk behaviors increase risks of premature morbidity and mortality, little is known about the multiple health risk behaviors in Chinese college students.

To investigate the prevalence of multiple health risk behaviors and its relation to mental health among Chinese college students.

A cross-sectional study was conducted in Wuhan, China from May to June 2012. The students reported their health risk behaviors using self-administered questionnaires. Depression and anxiety were assessed using the Self-Rating Depression Scale (SDS) and Self-Rating Anxiety Scale (SAS), respectively.

A total of 2422 college students (1433 males) aged 19.7±1.2 years participated in the study. The prevalence of physical inactivity, sleep disturbance, poor dietary behavior, internet addition disorder (IAD), frequent alcohol use and current smoking was 62.0%, 42.6%, 29.8%, 22.3%, 11.6%, and 9.3%, respectively. Significantly increased risks for depression and anxiety were found among students with frequent alcohol use, sleep disturbance, poor dietary behavior, and IAD. Two step cluster analysis identified two different clusters. Participants in the cluster with more unhealthy behaviors showed significantly increased risk for depression (odd ratio (OR): 2.21; 95% confidence interval (CI): 1.83, 2.67) and anxiety (OR: 2.32; 95%CI: 1.85,2.92). This study indicates that a relatively high prevalence of multiple health risk behaviors was found among Chinese college students. Furthermore, the clustering of health risk behaviors was significantly associated with increased risks for depression and anxiety.
Attitude Of Primary Care Physicians Towards Promoting Regular Physical Activity In Prince Sultan Military Medical City, Riyadh, Kingdom Of Saudi Arabia

Meshal AL Rashdi
Meshal AL Rashdi; Umar Yagoub Mohammed
Ministry of Health
Saudi Arabia
dr.meshal.k@hotmail.com

Physical inactivity is biggest health problem of this millennium and promoting regular physical activity by primary care physicians is considered to have pivotal role to combat the modern day non-communicable diseases.

The aim of current study was to access the attitude and barriers of primary care physicians towards promoting regular physical activity in Prince Sultan Military Medical City, Riyadh.

This cross sectional study was conducted between November 2014 and July 2015 at Prince Sultan Military Medical City Riyadh, Saudi Arabia. A total of 80 participating primary care physicians were evaluated for their attitudes and perceived barriers towards promoting physical activity through a structured questionnaire after their informed consent. Data was entered and analyzed with SPSS. As it was descriptive study, no further statistical tests were required.

A majority of physicians consider health promotion in general (97.5%) and promoting physical activity (100%) an important part of primary care. Advice to increase physical activity was given by 93.8% of them. 95% and 92.5% consider themselves effective for health promotion in general and for promotion of physician activity respectively. Lack of time (72.5%), patients ignore recommendations (65%) and insufficiency of educational materials for patients (53.8%) were most frequently perceived barriers by primary care physicians towards promoting physical activity.
Cervical cancer is the second most common cancer among Malaysian women (Malaysian Cancer Registry Report 2003) regardless of the measures taken by the government to reduce the incidence of cervical cancer by providing free Pap smear tests since 1995. Less than half of the Malaysian women (47.3%) have gone through screening and despite educational efforts, the uptake of pap smear has been low (IARC, 2005). Since 2010, a national school based HPV vaccination programme has been introduced but this needs to go hand-in-hand with improvement of screening. Self-administered cervical screening has been shown to be an acceptable alternative in different populations (Crofts et al., 2015; Virtanen et al., 2014) and may be able to overcome screening barriers such as embarrassment, lack of time and fear(Baskaran et al., 2013; Oranratanaphan et al., 2010).

The main objective of this study is to explore the attitudes and acceptability of self-administered cervical sampling among multi-ethnic Malaysian women. The barriers of having a pap smear were also addressed in this study.

A cross-sectional study was carried out via interviewer-administered surveys from August 2013 till August 2015 at 4 different government-run health clinics, in Klang Valley Malaysia. Subjects were recruited from the participants of an on-going community-based human papillomavirus prevalence study (The Malaysian HPV Prevalence Study) and answered a standard questionnaire before and after self-sampling. The cervical self-sampling was performed using a simple brush (“Just for Me”, Preventive Oncology Inc, Hong Kong Ltd.). Additional questions such as method of preference and willingness to go for a follow-up was asked. Participants were aged between 18 and 60 years old. The exclusion criteria included those who are pregnant, menstruating, or virgins. Acceptability indices for the self-administered cervical sampling included the following 6 items: comfort, complexity, convenience, embarrassment, pain, and confidence. A 5-item Likert scale was used in the pre and post self-sampling questions. Responses to the 6 items ranged from 1 to 5 whereby 1 represented a very negative experience and 5 denoted a very positive experience for each of the items. Both sections of the survey showed a high internal consistency with the pre-questionnaire having a Cronbach’s alpha value of 0.796 and the post questionnaire being 0.862. The data accumulated was analysed using IBM Statistical Package for Social Science (SPSS) version 20. Descriptive and multivariate analysis was used on the data. The test was considered statistically significant when the p-value was less than 0.05.

A total of 839 women were interviewed and the median age of the study participants was 38 years where the 25th and 75th percentile was 30 and 48 respectively. More than 80% of the study
population were pre-menopausal, aged 50 years old and below. Malay women represented the largest ethnic group (47.9%), followed by Indians (30.8%), Chinese (18.8%) and other minorities (2.5%) with 86.3% being married. More than half (57%) of the participants were employed while 35.2% were fulltime home-makers. A vast majority (62.1%) had completed secondary education. Only 12% of women reported a monthly household income of more than RM5000 (USD1100). Out of the 839 women, a majority have heard of Pap smear before with 63.1% ever undergoing a pap test. Most of the women who had undergone Pap smear tests, received it in the last 5 years preceding the study. Of women who have never undergone Pap test, primary barriers that were stated include lack of awareness (13%), lack of time (10%), no existing symptoms (6.6%) and fear (5.1%). There was a positive response during the pre-questionnaire with more than half finding self-sampling agreeable for all 6 items before carrying out self-sampling. Negative perceptions were all reduced post self-sampling.

Majority (95%) were willing to follow-up a positive result at the hospital and close to 70% of those interviewed indicated a preference for self-sampling over Pap test. The study revealed that age, ethnicity and previous pap test experience were independent factors associated with preference for self-sampling. The older the individual, the less likely they were to prefer self-sampling (OR=0.94, 95% CI: 0.895 - 0.981). In terms of ethnicity, the Chinese were less likely to prefer self-sampling than the Malays (OR=0.57, 95% CI: 0.333-0.985). Participants who have never undergone a Pap smear before this were also more likely to prefer self-sampling than physician-sampled Pap testing (OR=0.0551, 95% CI: 0.347-0.873) whereas those who have done it were less likely to prefer self-sampling.

Overall, Malaysian women from different backgrounds found the self-sampling method a very acceptable alternative to the accustomed Pap smears.
Awareness And Attitude Of Primary Healthcare Professionals On The Relationship Between Diabetes Mellitus And Periodontitis

Aimee Teong Chuin Ai
Aimee Teong Chuin Ai; Raja Wahithnissa binti Jawahar Raja; Aqilah Zafirah Hanis binti Ismail; Nor Nadia Farasha binti Abdullah; Tin Tin Su; Wong Li Ping
University of Malaya
Malaysia
aimee.teong@gmail.com

Diabetic patients are 2-3 times more likely to develop severe periodontitis as compared to non-diabetics. The periodontium, a vascularized end organ, is susceptible to diabetic microvascular complications. It is projected that the prevalence of diabetes among adults in Malaysia will rise to 21.6% by the year 2020. Despite the worldwide recognition of the complications of diabetes mellitus, awareness and attitudes towards the increased risk of oral disease among diabetic patients and healthcare professionals are not fully addressed.

The objective of this study is firstly, to assess the awareness and attitude of non-dental primary healthcare professionals on the relationship between diabetes mellitus and chronic periodontitis. Secondly, to understand the referral behavior of healthcare professionals to their dental counterparts in health clinics with in-house dental services. Thirdly, to spread awareness of the increased risk of severe periodontitis in diabetic patients among the general public.

A cross-sectional study was conducted at randomly sampled primary care clinics with in-house dental facilities in the district of Klang, Selangor, Malaysia. 20 medical officers were recruited. Their awareness and referral behavior of periodontitis among diabetics were assessed, using self-administrated questionnaires. Descriptive data analysis was performed.

Of the 20 respondents, 80% acknowledged the association of diabetes and oral health, similarly for chronic periodontitis. Less than half, 45% of healthcare professionals were aware of the pathophysiology of it. With the in-house facility of dental clinics, early referral behaviour was low as evident by the majority of them, 95% would not refer diabetics without oral symptom complaints for oral check-up. All of them will refer diabetics with oral symptoms to the dentist, and not the periodontist (25%). The main reason for referral was gum bleeding.

In conclusion, there is a lack of awareness and early referral behavior for oral healthcare by non-dental primary healthcare professionals, even when health clinics have in-house dental services. It is the role of primary care healthcare professionals to educate diabetic patients about the risk of getting periodontitis. Efforts in primary prevention and early detection to stop disease progression should be enhanced, given the substantial cost incurred by periodontitis specialist treatment. Primary prevention programs involving partnership between primary care practitioners and oral healthcare professionals should be enforced to ensure holistic care of diabetic patients.
Economic growth has brought significant changes in the dietary patterns and lifestyles of the Vietnamese population. This has resulted in Vietnam undergoing a nutrition transition. The challenge for Vietnam in combating the nutrition transition problems is to implement prevention strategies to halt the growing trend in obesity and noncommunicable diseases (NCDs), against a background of prevailing nutrient deficiency diseases. Critical to these efforts is the need for a professional workforce with sufficient public health nutrition (PHN) knowledge and skills to influence policy-making and program delivery.

Professionals who provide health and nutrition education and consulting to the public need to understand the environmental and social contexts that influence the populations health behaviours. In turn, their perceptions of the populations health problems reflect their preparedness and readiness to advocate for better population health. The preparation of these professionals is a major task for university nutrition lecturers.

The current study aimed to investigate the awareness of health problems associated with the nutrition transition among Vietnamese health and school education professionals and university nutrition lecturers. These professional groups were selected because they play key roles in the communication of knowledge of health risks to future professionals and the broader community. The main research aim was to establish an understanding of health and education professionals current concerns and preparedness to respond to the nutrition transition.

An online survey was conducted among 242 Vietnamese health and school education professionals, and university nutrition lecturers. Third-party introductions were used to recruit potential participants for the survey. The websites of 18 Vietnamese universities were used to contact lecturers who taught nutrition to undergraduates in education, food science and processing, medicine and health sciences (public health, nursing, dentistry).

The questionnaire content was informed by a literature review and two qualitative studies (interviews). Five main questions, each with several items were asked. Five point response scales were used.

Question A examined respondents awareness of the shifts in the undernutrition and obesity conditions in the population in recent years. In question B, respondents were asked to indicate their perceptions about the increasing prevalence of NCDs in the population. Question C elicited respondents knowledge about public health priorities to tackle the double burden of undernutrition and obesity and increased NCD prevalence in developing countries. In question D, respondents were
asked to indicate the reasons for the growth in child obesity prevalence. Question E investigated respondents views of food marketing to children.

The responses were analysed via IBM SPSS Statistics. The respondents were divided into three occupational groups: university nutrition lecturers, health professionals (general practitioners, medical doctors, nurses, and health administrators), school education professionals (school principals and teachers). Comparisons of the responses of the three groups were tested via the Crosstabs program.

The increasing prevalence of obesity in children and adults was recognised by most respondents (96.7% and 93.4%, respectively). There were no statistically significant differences between the proportions of respondents who saw obesity as a critical health problem and those who were concerned with the seriousness of undernutrition in Vietnam (66.9% compared to 61.2% of all the respondents).

Nearly all the respondents agreed that NCDs prevalence in adults had increased (96.7%). Although 43.8% of the respondents believed that NCDs were more common in high-income population groups than low-income groups, more than half reported there had been an increase in the prevalence of NCDs among low-income population groups (54.5%). Nine out of ten respondents agreed that NCDs have become prevalent in young adults (91.3%).

Nearly half of the respondents believed that it was much easier to control underweight than to control obesity (48.8%). The same proportion held the view that the government should complete its attempts to control underweight before trying to control obesity (48.8%).

Fewer respondents saw food marketing as a cause of the increased prevalence of obesity compared to other reasons such as consumption of unhealthy food, increased prosperity (71.5% compared to 95.5% and 83.5%). The three professional groups differed in their perceptions of the influence of food marketing on population health problems. In particular, 86.0% of the health professionals believed that food marketing was responsible for the growth in child obesity, but only 71.7% of the school professionals and 65.5% of the lecturers held the same view.

Overall, although most of the professionals correctly understood the recent changes in the nutrition-related conditions in Vietnam, many had less accurate perceptions of the underlying drivers and actions needed to address these problems. The lesser awareness, especially among nutrition lecturers, of food marketing and its impacts on children's health suggests that they may not adequately understand the drivers of the nutrition transition. Furthermore, the view expressed by half the respondents that undernutrition problems should be controlled before tackling overweight and obesity suggests they may misunderstand current Vietnamese and international public health priorities to mitigate the negative effects of the nutrition transition. Undernutrition and obesity need to be addressed together, NCDs cannot be ignored while efforts to reduce undernutrition continue.

The university nutrition lecturers did not show any greater awareness of the nutrition transition than their extramural colleagues. More experienced lecturers might be expected to have had higher levels of knowledge and perceptions of the severity of the health problems associated with the nutrition transition. This knowledge gap may stem from insufficient opportunities for lecturers to
acquire up-to-date knowledge and the absence of nutrition transition topics in university nutrition curricula.

The results suggest that greater provision of nutrition education for health and other professionals is essential, enabling them to support public health policies and programs. In the same vein, better resourcing and public health nutrition education of university nutrition lecturers is required to enable them to enhance the education of future health and education professionals.
Awareness, Willingness And Factors Influencing Organ Donation Among Malaysians With Secondary Or Higher Level Of Education: A National Online Survey

Sandheep Sugathan
Sandheep Sugathan; Davinder Singh Bagher Singh; Myint Myint Soe; Umabalan Thirupathy; Tham Sook Ying
Universiti Kuala Lumpur Royal College of Medicine Perak
Malaysia
drsandheep@gmail.com

Organ donation is a surgical procedure for the removal of organs from donor for the purpose of transplantation. Organ transplantation is the replacement of diseased and damaged organs. It is an established treatment for end stage organ failure. Globally, the demand for organs exceeds the supply of organs and Malaysia has one of the lowest deceased organ donation rates in the world, with 0.48 deceased organ donations per million populations in 2010, and live kidney transplantation rate of 0.93 per million population. Some studies in Malaysia have suggested the possibility of religious and cultural factors as the main impediment to organ donation in Malaysia. Not much studies have been done to determine the level of awareness and the reasons for non-willingness among those with secondary or higher level of education on a national level.

Aim of this study was to determine the level of knowledge about organ donation, willingness to donate their organs upon death and reasons for not donating among adult Malaysians who were having secondary or higher level of education using an online survey on a national level.

This was a cross-sectional online survey conducted among Malaysian adults with secondary or higher level of education. The collection of data was done for a period of 2 weeks from 24 December 2014 to 7 January 2015 using Google form survey in either Malay or English languages which were made available through various online channels. Survey was sent to all the students and staff of all UniKL institutions, various facebook and linkedin groups of educational institutions in Malaysia. The responses were collected and those who were not Malaysian citizens and those who were having education level lower than secondary level were excluded from the study. Minimum required sample size was calculated assuming that 35.2% of adults will be having good awareness level and willingness to donate organs based on previous research findings with an absolute precision of 5% for a 95% confidence interval was 350. The total sample of this research was 521.

The online questionnaire was designed using reference from various sources including the Ministry of Health, Malaysia. The questionnaire consisted of 3 parts which were on socio-demographic characteristics, respondent's knowledge and attitude about organ donation, and willingness to donate, consent for a family member to donate organs after death; and to donate or accept organs from persons of different socio demography. Data was analysed using SPSS version 17 using univariate and bivariate analysis.

A total of 521 adult Malaysians participated in this study. Most of the participants were females (51.6%), Chinese ethnic origin (55.7%) and those with degree or higher level of education (81%).
mean knowledge among 521 respondents was only 3.73 (95% CI 3.62 to 3.85) out of a possible total of 6; and it was significantly influenced by the respondent being in a health care-related field of study or career; registration status as organ donor, and overall willingness to donate or accept organs from a person of different race or religion.

The main sources of information on organ donation were health services (55.5%), internet (51.6%), newspapers / magazine (42.6%), TV / radio (33%), friends (31.5%) and health events (30.3%).

A high proportion of participants (80%) believed that there is a shortage of organ donors in Malaysia. The knowledge about most of the aspects of organ donation was above 60%. The knowledge about age for donation was less among the participants (55%).

It was found that 70.3% of respondents were willing to be an organ donor and 20.6% had already registered to donate their organs after death. Registration status as an organ donor had a significant association with race, religion, state of residence, health care-related field of study or career, willingness to give consent for family members to be an organ donor and willingness to accept organs from others. Registration status was significantly higher among Indians, Christians and those who were from Selangor / Kuala Lumpur. Almost 71% of those who registered as organ donor, expressed that they will give consent for their family member to be an organ donor. About 69.1% of those who were registered were having the field of study or career related to medicine or health care.

Around 93% of participants were willing to donate their organs to those belonging to another religion and it was significantly higher among those who were already registered to be an organ donor. Almost 90.4% of participants were willing to accept organs from those belonging to another religion and it was significantly higher among those who were already registered.

Around 95% of participants were willing to donate their organs to those belonging to another race. All those who were registered, expressed that they were willing to donate organ to those of another race.

Almost 95% of participants were willing to accept organs from those belonging to another race. All those who were registered, expressed that they were willing to accept organ from those of another race.

This research shows that lack of awareness was the major reason for reduced registration rate for organ donation among Malaysian adults with secondary or higher levels of educations. In our study the effect of religion or race was not a significant factor affecting the willingness for organ donation. More awareness through new and more innovative methods of deliveries should be considered.
Behavior Based Study To Prevent Smoking

Dr. dr. Imam Mochny, MPH
Dr. dr. Imam Mochny, MPH
FKM-UA, Pub.Hlth.Sch. Surabaya, Indonesia
Indonesia
imam@mochny.com

Smoking, the leading cause of preventable death worldwide, is responsible for 5 million deaths worldwide each year. By 2010, the World Health Organization estimates the annual global cost of tobacco-related illness to be approximately US$ 500 billion. Since about a decade, Varenicline tablet has been used in UK & USA to help smokers to reduce smoking; however, it is not yet clear its availability and research in Indonesia, although at least two promising trials were sponsored by Pfizer before and after 2007 abroad. However, on 1 February 2008, FDA-USA issued new safety warnings on the drug; by then, it had received information on 491 cases of “suicidal ideation” with 37 instances of actual suicides. So far, In Indonesia, convincing results of E-cigarette studies are not yet publicly available.

The objective of this study is to prevent cigarette smoking by some Behavior Based Studies

Promising behavior based studies are e.g. 1) Salutogenesis (salute/salus=health; genesis= origin) is a health approach. It has some conventional components: prevention-protection-education/promotion; and closely links with: 2) Sense Of Coherence/SOC that has some sub-items i.e. Holistic-Manageability-Meaningfulness. Antonovsky A, Lindstrom B, and Bauer BF, stated that “SOC focuses more on resources for health than on risks for disease; it is a way of thinking, being, acting, and meeting in a health promotion manner” (“Sense of Coherence/SOC Scale and Salutogenesis”, 1979, 2007, 2009, 2012, 2013). The SOC which is a scale of general orientation that expresses a person’s pervasive, enduring, and dynamic feeling of confidence related to: a) the stimuli from one’s internal and external environments in the course of living are structured, e.g. peer’s smoking; plenty of huge public posters by powerful tobacco industries in Indonesia; weak Law Enforcement among cigarette-producers; relatively ‘poor’/neglected’ Warning Signs of Tobacco Dangers; etc. And b) the available resources to meet his/her demands which are challenges, and worthy of personal investment and engagement caused by these stimuli, e.g. ‘relatively cheap’ and illegal cigarettes; local cloves for ‘kretek’ cigarettes which are exported to but rejected/banned by USA; etc.

The SOC scale has been introduced into Occupational Health Safety/OHS curriculum at the Public Health School, FKM-Unair, with promising results since 2012. This increased Holistic Coping Mechanism Thinking (HCMT/also called ‘Holistic Approach’) among 18 students from 22.2% into 77.8% in a 2012/2013 study during about 4 months; since then, each year, similar encouraging results have been noted. The Intervention was a student’s learning (not teaching) experiences on holistic philosophy, i.e. his/her position in an institution in the context of family, social, national, international, global, and universal levels. This knowledge (Kwan, 2013) is an integration of one’s behavior which is relevant to humanity(e.g. habit, belief, ethics, religion, culture), and Population which is significant to society(e.g. family, community, world, universe),
as well as Life Sciences which is important for living (e.g. well-being, nature, environment). It was then appropriately discussed in the context of an academic subject. Depending on the student’s knowledge and interest, learning of the philosophy (e.g. smoking) may go deeply to faith and religion (Francis Bacon in ‘Philosophy’, 1561-1626; Imam Mochny in ‘Intervention of Quantum Message at Alpha Theta Consciousness’/IQMATC (6-12 Hz) to be linked with Salutogenesis, resulted in 93.3% non-smokers within 1 year, n=15 university students, 2006-2008).

Behavioral studies of SOC & Salutogenesis, can be adequately promoted to prevent expected and un-expected accidents in a work-place; prevention among young people who want to smoke and or want to stop smoking; etc. While the SOC can be focused at specific environment such as philosophy at a work-place to prevent accidents, the Salutogenesis is a more comprehensive approach covering of broader subjects e.g. smoking, Law Enforcement, Tax Mgt., Cigarette Industries, etc. It is necessary to further explore the mutually supported SOC & Salutogenesis in the context of student’s well-being esp. smoking behavior. Present approaches of Health Education/Promotion/Salutogenesis are mostly at Beta wave consciousness; further research at Alpha-Theta consciousness such as IQMATC is recommended.
Building Local Capacity To Reduce Road Traffic Injury In Rapidly Motorising Countries

Mark King
Queensland University of Technology
Australia
mark.king@qut.edu.au

Road traffic crashes represent a significant public health issue, being a major cause of death, injury and disability in rapidly motorising countries. Around 1.25 million are killed each year, and up to 50 million injured, with 90% of the burden falling on low and middle income countries. A substantial proportion of those killed and injured are people of working age, which contributes to a negative impact on development. In the current UN Decade of Action for Road Safety 2011-2020, a major emphasis has been placed on building road safety capacity in low and middle income countries. However there is a lack of clarity about what this means in practice. In addition, multiple agencies are involved in directing and implementing road safety initiatives and programs, which presents a challenge for collaboration which varies from country to country; their cooperation is therefore an integral but often recognised element of road safety capacity.

The goals of this presentation are: to clarify what road safety capacity means for rapidly motorising countries in relation to the outcome of reducing the burden of road traffic injury; to articulate the aims of road safety capacity building with respect to organisations and individuals at different levels, and where multiple domains and agencies are involved; to critically analyse case studies of road safety capacity building in rapidly motorising countries; to recommend an approach to more effective road safety capacity building in rapidly motorising countries and; to identify gaps in knowledge.

A mixed method approach is taken, combining a critical analytical approach with qualitative and quantitative assessment of secondary source material.

Contemporary perspectives on capacity building, both in general and for road safety, are located and analysed. The analysis framework is the Road Safety Space model, which identifies the factors contributing to a particular road safety issue along economic, institutional, social and cultural dimensions operating at varying levels. The challenges presented by the multiple agencies involved, the different levels of staff (operational through to executive level) and the dynamics of central/local decision-making and action are outlined and critically analysed.

Special consideration is given to current development priorities such as good governance, since governance failings such as inadequate legislation or corrupt enforcement practices weaken the legitimacy of traffic legislation and police enforcement, both of which are crucial tools in prevention of road traffic injury.

The understanding developed through this analytic approach is then explored through case studies of road safety capacity building, with particular emphasis on Indonesia, where our Centre has undertaken road safety capacity building workshops since 2009.
The lessons learned from the case studies are used to develop a recommended approach to road safety capacity building in rapidly motorising countries, which focuses on fostering collaboration between agencies at the local level. Gaps in knowledge are also identified.

Capacity building as a term is defined and used in a variety of ways by international agencies and academics, some of which are inconsistent at the conceptual level. It is also interpreted in different ways by individual beneficiaries, due to the overlap between the capacity of an organisation and the capacity of the individuals within it. At the organisational level the term is used across a range of domains, including financial capacity, institutional capacity and operational capacity. A dominant theme in recent years is the need for recipients in developing countries to have a greater role in defining their own capacity needs.

Implementation of road safety programs and initiatives typically involves transport, highways, police and health agencies, though there are a number of other organisations that could participate. An aspect of capacity building that is often neglected is the fostering of collaboration between these agencies. The challenge that this presents varies from country to country, meaning that local knowledge is a crucial input into planning for capacity building. An example from Indonesia illustrates this point, and in addition demonstrates how broader trends such as the push towards good governance can influence how local knowledge can be used (or not). It is noteworthy that the case study demonstrates that there needs to be a balance between locally generated and externally defined capacity needs.

Measurement of success in capacity building remains a challenge. The evaluations of capacity building tend to be process-oriented, not outcome-oriented, and are to some extent biased by the reliance on the feedback of individuals with their own conceptions of what capacity building means. There is a need for long term follow-up, although there will always be numerous extraneous factors that can influence the success of capacity building in either a positive or a negative direction.

A more structured approach to capacity building for road safety is proposed, utilising the Road Safety Space model as a way of ensuring that country-specific and local factors are identified and taken into account. The multi-agency nature of road safety points to the fostering of collaboration as a key aim. At the same time, there is a need to move beyond process evaluation to outcome evaluation of road safety capacity building, while acknowledging the challenges that this represents.
Cadmium And Chromium Exposure Of Workshop Workers In PTBA Coal Mining At Tanjung Enim South Sumatera

Rima Septiani
Rima Septiani ; Tan Malaka ; Amar Muntaha
Bina Husada College of Health Sciences Palembang
Indonesia
rimaseptiani2909@yahoo.com

Air pollution in the work environment can be hazardous and toxic materials, such as chemicals that form of welding fumes which consists of various metal materials which are used, mainly heavy metals, cadmium (Cd), Chromium (Cr) and Nickel (Ni), which can be toxic to Welding workers.

This study aimed at evaluating workers exposure to metal fumes in the forms of Chromium and Cadmium and analyze predictors of these metals metabolites in urine. Forty employees working at the workshops of PTBA as welders recruited for the study and were asked about their age, length of service, and smoking habit. Aerial concentrations of these metals in the welding fumes of the breathing air were sampled and analyzed. Urine samples of all study subjects were collected and analyzed for Cd and Cr. The aerial concentrations of metals were compared to the respective ACGIH TLVs (2014) while the urine concentrations were compared to ACGIH BEIs (2014).

It was found that aerial Cadmium was varied between 0.0001 to 0.0160 mg/m3. ACGIH 2014 adopted TLV for Cadmium in the work room air at 0.01 mg/m3. The concentration of aerial Chromium was varied between 0.019 to 0.623 mg/m3. ACGIH 2014 adopted TLV for Chromium in the work room air at 0.5 mg/m3. The urinary Cd were found to be varied between 0.36 to 1.24 microgram/ g-creatinine. ACGIH 2014 BEI on Cadmium was set at 5 microgram/g-creatinine. Urinary Cr was found to be varied between 4.61 to 46.68 microgram/L. The ACGIH 2014 BEI on Cr was set at 25 microgram/L. Thus the aerial Cd and Cr were found to be above the ACGIH TLVs while urinary Cd was above the reference value of ACGIH BEI. It was also found that smoking habit was a good predictor of urinary Cd.
Caesarean Section Associated With Access To Antenatal Care, Place Of Delivery And Insurance: Influence Of Wealth Quintile.

Septyana Choirunisa
Asri C. Adisasmita; Septyana Choirunisa
Faculty of Public Health, Universitas Indonesia
Indonesia
septy.nisa@gmail.com

Access to comprehensive emergency obstetric care, which include access to caesarean section (CS), has been proven to prevent maternal and neonatal mortality. Reports had shown that rates of CS has increased substantially both in developed as well as in developing countries, including Indonesia. Unequal access to CS had also been reported worldwide, with highest rates among the richest and lowest among the poorest. Access to quality antenatal care (ANC) and delivery in health facility are believed to be the key factors to influence access to CS; in addition, delivering in private hospital may increase the likelihood to undergo CS.

This analysis attempts to explore whether the improvement/increase in CS access in Indonesia was influenced by access to quality ANC, delivery in health facility and possession of health care insurance according to socio-economic strata.

We used data from the 2007 and 2012 Indonesia Demographic and Health Survey. We limited our eligible sample to most recent births with two or more live-births (15,334 women in 2007 survey, and 15,262 in 2012 survey). Our outcome variable is the occurrence of CS and its increase in the two surveys. Other variables measured to predict the improvement in access to CS are ANC, place of delivery, health insurance ownership, residence, wealth-quintile, maternal education, and complication(s) during pregnancy. We used frequencies to describe the rates and increased rates over-time of CS, as well as for indicator variables. Multiple logistic regression analysis was used to predict the strongest association between selected indicators and access to CS.

Overall, 5.4% of women had a CS in 2007 survey, and 10.4% in 2012 survey, an overall increase of 48.1%. The increase varied substantially based on wealth index, 146.2%, 148.3%, 125.6%, 121.1% and 45.5%, respectively from the poorest to the richest quintile. The increase in CS rates were more considerable if women gave-birth in public compared to private hospital, and among women in poorest and poorer quintiles. Adjusted odds ratios for CS were significant for wealth quintiles, gave-birth in public hospital, having health insurance, and presence of any complication during pregnancy.

These results indicate that increase access to CS was more noticeable among women in lower wealth quintiles who gave-birth in public hospital, suggesting that insurance provided by the government has an important role.
Caesarean Section Trends In Hangzhou: A Public Health Success

Liqian Qiu
Liqian Qiu; Jing Tao; Lin Li; Weiwei Wu; Colin Binns; Andy Lee
Women Hospital, School of Medicine, Zhejiang University, China
China
qiulq@zju.edu.cn

Hangzhou, with a population of eight million, is the capital city of Zhejiang Province located in Eastern China. It is an affluent city with a number of high-tech industrial developments. Hangzhou maternal and child health regulation required all mothers delivering babies in hospitals. In last decade birth information was recorded in computer in all hospital which located in Hangzhou city. Birth number was monitored by Hangzhou Health Bureau computer center. Hangzhou Health Bureau should report maternal health information to Women Hospital, School of Medicine, Zhejiang University annual. Generally the natural vaginal delivery should be the first choice for women at term who have no clinical indications. Obstetric intervention programs were instituted in Zhejiang hospitals to reduce the rates of c-section. These included: antenatal education for women and their families on the benefits of vaginal deliver; weight control programs for pregnant women to reduce macrosomia; introduction of a dula program to provide support for mothers during labour; Improved pain management during labour; and programs to discourage doctors from undertaking surgery without clear clinical indications.

In addition the population policy in China has changed so that where either of parents is from one child families they may now have two children. To document the trends in Caesarean Section rates in the city of Hangzhou, Zhejiang Province, PR ChinaHangzhou, with a population of eight million, is the capital city of Zhejiang Province located in Eastern China. It is an affluent city with a number of high-tech industrial developments. The local maternal and child health regulation requires all mothers delivering babies in hospital. In last decade birth information was recorded in computer in all of hospital which located in Hangzhou city. Birth number was monitored by Hangzhou Health Bureau timely. Recognising that natural vaginal delivery should be the first choice for women at term who have no clinical indications for obstetric intervention programs were instituted in Zhejiang hospitals to reduce the rates of c-section. These included: antenatal education for women and their families on the benefits of vaginal deliver; weight control programs for pregnant women to reduce macrosomia; introduction of a dula program to provide support for mothers during labour; improved pain management during labour; and programs to discourage doctors from undertaking surgery without clear clinical indications.

In addition the population policy in China has changed so that where either of parents is from one child families they may now have two children. All mothers in Zhejiang Province are required to deliver their infants in a health care facility. All deliveries are recorded on a central database held by the Zhejiang Womens Health Department In the past decade the number of deliveries in Hangzhou hospitals has increased from 64383 in 2005 to 132038 in 2014. The steady increase is related to increased population in Hangzhou, the expansion of hospitals to include deliveries from nearby communities and the trend for migrant mothers to have their delivery in Hangzhou rather than returning to their own villages.
During the decade from 2005 the proportion of deliveries by caesarean section has decreased significantly from 53.25% to 46.01%. In 2014 this is 9500 fewer operative deliveries that would have been expected if the 2005 rates had continued. The increase in the rate of Caesarean section in Hangzhou has been halted and there has now been a consistent decline over the past decade. This has many potential public health benefits. Efforts are needed to reduce the rate in China to closer to the optimum level.
Calf Circumference Measurement As A Marker Of Low Birth Weight Infants: A Validation Study On Javanese At Sub-District Of Bumiayu, Brebes Regency, 2014

Eti Budiarti
Eti Budiarti; Kusharisupeni; H.E Kusdinar; Wahyu Kurnia YP
FKM Universitas Indonesia
INDONESIA
etibudiarti16@yahoo.co.id

Low birth weight infants are those with birth weight less than 2500 grams. LBW infant cases contribute to 60-80% of neonatal deaths. In fact, every birth weight should be measured accurately. Still, according to WHO and UNICEF in 2004, half of those infants born in the developing countries were not weighed because of some reasons: the scales did not exist, damaged, or even never been calibrated. Thus, it is necessary to identify surrogate measurement of LBW.

The purpose of this research is to collect anthropometric measurements (head, upper-arm, chest, thigh, and calf circumference) as an accurate alternative to identify LBW infants born of women at Sub-district of Bumiayu, Brebes Regency in 2014.

This study was conducted through cross-sectional design. The variables measured were head, upper-arm, chest, thigh circumference, and calf circumference, and also weight of newborns. Measurements were made in a span of 0 to 24 hours after birth. All measurements were recorded to the nearest size of 0.1 cm and 0.1 gr for weight loss. The method of standard statistic was adopted for the strength of the relationship (r), the determination of the value of AUC, cut point (cut of point) sensitivity, specificity, NDP and NDN.

The results showed that the calf circumference had the highest level of sensitivity (88.9%) compared with other measurements. Having cut of point 9.75 cm, calf circumference showed the highest positive predictive value (NDP) and negative predictive value (NDP). In other words, infants with calf circumference less than 9.75 cm are those born with LBW.
Cardiac Rehabilitation (Cr) Received, Access To Cr Services, And Level Of Functional Disability Among Patients After Acute Coronary Syndrome And/Or An Intervention For Cardiac Reperfusion

Vindya Kumarapeli
Vindya Kumarapeli; Rohini de A. Seneviratne; Brian Oldenburge
Ministry of Health, Sri Lanka
Sri Lanka
vindyalk@yahoo.com

Ischemic Heart Disease is the leading cause of mortality in government hospitals in Sri Lanka since 1998. Cardiac rehabilitation (CR) is offered to patients after Acute Coronary Syndrome (ACS) or interventions for cardiac reperfusion (ICR).

The study aimed to describe CR received, functional disability and access to CR services among patients after ACS or ICR.

A community-based cross sectional survey was carried out in the District of Gampaha, among 2420 persons, aged 30 years selected by cluster sampling (48 clusters, 50 subjects in each), with male:female (1:1). Trained interviewers collected data using a pre-tested interviewer administered questionnaire: advice on medication, management of future acute cardiac events, risk factor control; return to work; stress management; blood pressure, sugar and lipid by clinic records; Used food frequency questionnaire, IPAQ-short version, Access to Ambulatory care Questionnaire for CHD, WHODAS 2.0.

Out of the 61 diagnosed with ACS/ICR: 62.3% (38) males, co-existing hypertension 62.3% (38), DM 32.8% (20), dylipidaemia 55.7% (34). Discharge advice given to: 83.7% (51) on regular medication, 93.4% (57) on management of future cardiac events, on risk factor control: diet 91.8% (56), PA 86.9% (53), smoking 96.7% (59), maintaining BMI 67.2% (41), when to return to work 26.2% (16), stress management 55.7% (34). Of them 78.7% (48) consumed sub-optimal diet, 73.8% (45) low physical activity, 11.5% (7) current smokers, 62.3% (38) BMI>23.0, 18.0% (11) blood pressure 140/90 mmHg, 16.4% (10) blood sugar 125mg/dl, 31.1% (19) dylipidaemia. CR services reported as: 91.8% (56) available, 13.1% (8) accessible, 62.3% (38) acceptable, 65.6% (40) accommodative, 36.1% (22) affordable; disability level: 49.2% (30) mild, 37.7% (23) moderate, 4.9% (3) Severe/Extreme. Advice during follow up care was not adequate. Level risk factor control, was not satisfactory especially diet, physical activity and BMI. Although CR services were available always/most of the time, they were not accessible and affordable.
Cardiorespiratory Fitness Attenuates The Obesity Risk In Chinese Children With Overweight/Obese Parents

Xintong Li
Xintong Li; Longbiao Cai; Fangrong Xu; Qiqiang He
wuhan university
People's Republic of China
826866476@qq.com

Previous studies showed that parental overweight (OW)/obesity (OB) was the strongest determinant of the obesity status of their offspring. On the other hand, higher cardiorespiratory fitness (CRF) has been found to be inversely associated with obesity. Nevertheless, the combined effect of parental obesity and CRF on the risk of obesity among children has been little studied.

To explore the interactive association between parental weight status and CRF with childhood obesity among a sample of Chinese schoolchildren.

A cross-sectional study was conducted in Wuhan, China from May to June 2010. Height, weight, and waist circumference (WC) of all children were measured, and body mass index (BMI) was calculated. General obesity and central obesity were determined by BMI and WC, respectively. CRF was determined by the 20-meter shuttle-run test. Parental BMI was calculated according to self-reported height and weight, and divided into normal or overweight (OW)/obese (OB) based on Chinese cut-off points.

A total of 587 Chinese children (343 boys and 244 girls) aged 9.6 (0.7) years participated in this study. Compared with those who had low CRF and at least one OW/OB parent, children who had high CRF and at least one OW/OB parent were 88% (OR: 0.12, 95%CI: 0.05-0.30) less likely to be total obesity and 91% (OR: 0.09, 95%CI: 0.04-0.20) less likely to be central obesity, and children who had high CRF and none OW/OB parent were 89% (OR: 0.11, 95%CI: 0.05-0.24) less likely to be total obesity and 92% (OR: 0.08, 95%CI: 0.04-0.16) less likely to be central obesity (all p<0.001). High level of CRF could attenuate the influence of parental obesity on their offsprings weight status.
Challenges In Extending National Health Insurance Program Coverage Among Informal Sector In Indonesia: Microeconomic Aspects, Operational Issues And The Role Of Stakeholders

Budi Aji
Budi Aji; Siti Masfiah; Siti Harwanti, Nur Ulfah, Hoang Van Minh
School of Public Health, Faculty of Health Sciences, Jenderal Soedirman University, Purwokerto, Central Java, Indonesia
Indonesia
budi.aji57@gmail.com

Extending national health insurance program (BPJS Kesehatan) toward universal health coverage especially among informal sector remains several challenges in the economic aspect of the households, operational issue of the coverage and cross cutting strategies among stakeholders to support the implementation of the program.

In response this issue, the study was conducted to identify several issues related to the microeconomic aspects, operational issues and the role of stakeholders of the efforts of the BPJS Kesehatan in extending its coverage among informal sector.

This was a case study among palm sugar farmers in the district of Banyumas particularly in two sub-districts of Cilongok and Somagede. A multi-method approach by combining quantitative and qualitative studies was employed. 207 respondents had been surveyed for the quantitative study, while 30 informants had been interviewed for the qualitative study. A thematic network analysis was adopted for the qualitative data analysis by using MAXQDA 11 software.

In the view of the microeconomic aspect, the study showed that ability and willingness to pay of the palm sugar farmers was low (mean ATP = IDR 61,203.00 and mean WTP = IDR 36,679.00) comparing to the BPJS Kesehatan premium for whole household members. In the operational aspects, premium revenue, collecting and channeling needs an innovative approach with considering characteristics of the palm sugar farmer's income and infrastructure of the informal mechanism for premium collecting and channeling such as by empowering farmer's association and cooperation. Cross-cutting strategy between district health office and BPJS Kesehatan branch office in health insurance program campaign among informal sector will make an adequate dissemination of the information. These study results can conceivably be extended to other informal sector population for which universal health coverage is policy option. Future research needs to expand the work to explore the effectiveness of the innovative intervention related to the efforts to increase BPJS Kesehatan enrollment among informal sector.
Chinese And Indian Women’s Experience With Alternative Medications Use For Menopause Related Symptoms: A Qualitative Study

Saw Ohn Mar
Saw Ohn Mar; Myint Myint Soe; Nur Rasyidah Bte Mohamad; Nur Amyrah Syahira Bt Mohd Zaki; Siti Norasikin Bt Abdul Halim; Wan Nurul Syafira Nadia Bte Wan Mohamad Tahir
university Kuala Lumpur, Royal College of Medicine Perak (Uni KL, RCMP) Malaysia
s_ohnmar@yahoo.co.uk

The prevalence of complementary medication use for menopause-related symptoms in Ipoh city, Malaysia, was 41.2% and the use was significantly higher among Chinese and Indians than Malays. However, a qualitative study suggested that Malaysian doctors were sceptical about CAM due to lack of scientific evidence. The aim of this study was to explore women’s rationalization for using alternative medications, their experience and their view on safety of long term use.

Two focused group discussions, involving five participants each for Chinese and Indian groups, were conducted separately in RCMP, Ipoh. Participants personal information was collected anonymously. The discussion covered five areas: determinants for taking medications, reason for choosing alternative medications rather than HRT, how these medications help them, their view on cost-effectiveness and concerns over long term use. The discussions were audio-taped, transcribed and analysed.

Chinese participants took supplements for controlling symptoms while Indian participants used herbs as a preventive measure during menopause according to their tradition. Women of both groups mentioned that they did not take HRT because of fear of side effects. Chinese group mentioned that medications remarkably improved their symptoms whereas Indian participants appreciated their herbals more for improvement in general well being than for specific symptoms. All participants agreed that using alternative medication is cost-effective. Both Chinese and Indian participants were quite confident in saying that long term use will not be associated with any side effects. However, Indian group emphasized that proper preparation of herbal compound using different types of leaves, is essential in order to avoid untoward effects.

It can be concluded that Chinese and Indian women used alternative medicine in prevention and treatment of menopause related problems even as they were avoiding HRT because of the fear of side effects. They believed that their supplements were effective, safe and cost-effective even with long-term use.
Climate Change Related To Malaria Incidence In 2010 And 2011, Mamuju, West Sulawesi, Indonesia

Haeranah Ahmad
Haeranah Ahmad; Dewi Karlina; Fajrin Nur Azizah; Mayumi Nitami
Faculty of Public Health, Universitas Indonesia
Indonesia
anha_achmad2185@yahoo.com

Indonesia is a tropical country that is vulnerable to climate change and can affect the spread of Vector borne diseases such as malaria. Mamuju is one of malaria endemic districts.

The aim of this study is to determine the relationship of climate and malaria incidence. The design used ecological studies with correlation analysis. The data of malaria incidence per month obtained from Health Office of Mamuju District, and the monthly climate data obtained from the Meteorology, Climatology and Geophysics Agency (BMKG).

The result of this study showed that in 2010 the humidity had significant association (P = 0.006; r = 0.737). This was caused by the condition of humidity which was approximately 78.10 to 83.97%. When the humidity was more than 75% of the mosquito were more active to bite human beings, gonotrophic and sporogony cycle was shorter so that it had potential to transmit malaria parasites and malaria incident was higher at the moment. In 2011 showed all climate factors had no significant association with the incidence of malaria.

The existence of a relationship between humidity on the incidence of malaria indicates the need for cooperation between the Meteorology, Climatology and Geophysics Agency (BMKG) with the Health Department to prevent, predict and handle appropriately.
Clinical Validity, Utility And Ethical Concerns Of Non-Invasive Prenatal Testing (NIPT) For Down Syndrome Among Obstetric Professionals In Hong Kong

Olivia Ngan
Olivia Ngan; Huso Yi; Samuel Wong; Daljit Sahota
JC School of Public Health and Primary Care, The Chinese University of Hong Kong
Hong Kong
oliviangan@link.cuhk.edu.hk

After more than a decade of trials for validating non-invasive prenatal testing (NIPT) for fetal aneuploidy based on sequencing cell-free fetal DNA in maternal blood, NIPT has established its clinical validity for Down syndrome with a high sensitivity of 99.9% and low false-positive rate of 0.02%. Subsequently, international professional societies recommend using NIPT as a contingent test for high-risk women before undergoing invasive prenatal diagnosis (IPD) that poses 0.5-1% miscarriage risk. NIPT has been rapidly adopted in private sectors globally. Yet, the test utility in the existing service provisions of Down syndrome screening (DSS) and diagnostic tests needs further investigation in terms of local contexts of public health systems. There is a dearth of empirical research studying how the test has been perceived and evaluated among DSS practitioners and how their perceptions are associated with public health ethical and social concerns in the implementation of NIPT.

The goals of this study were to examine the relationships between clinical validity, utility and ethical concerns of NIPT among obstetric professional in Hong Kong and to identify factors associated with the concerns in the adoption of NIPT. Hong Kong, along with the United States, firstly introduced NIPT as a commercial test in 2011 and its uptake rates were very high. By surveying views and experiences of NIPT in actual practices, the study findings addressed public health implications of NIPT.

A self-administrated questionnaire was conducted among 327 obstetric professionals, including obstetricians and nurses practicing in both public and private sectors of DSS between October 2013 and January 2014. Respondents were recruited using various methods to ensure the representativeness of the sample. Study measures were developed based on ACCE Model (Analytic validity, Clinical validity, Clinical utility and Ethical, legal and social issues). Clinical Understanding of NIPT assessed (1) knowledge of validity and (2) perception of utility. In the questions, respondents were asked to compare their understanding of NIPT with DSS and IPD individually in three options: Yes indicated that NIPT is perceived to be more distinctive; No indicated indistinctive; and Don’t Know indicated inability to distinguish the difference of NIPT from DSS or IPD. Ethical Concerns about NIPT was composed of 12 items rated on 5-point Likert scale from 1 (not at all concerned) to 5 (extremely concerned). The measure assessed attitudes towards ethical and social issues of following domains: (1) physician competency, (2) patient informed choice, (3) accessibility, and (4) social implications. Univariate and bivariate analyses were used to compare the respondents understanding of validity and perceived utility of NIPT compared with DSS and IPD. Using multiple ordinal regressions, multivariate analysis was used to examine the associations between clinical understanding of validity and utility and ethical concerns of NIPT, controlling for socio-demographic
and professional backgrounds. Adjusted odds ratios (AOR) and 95% CI were reported for variables found to be significant at \( p < 0.05 \) level.

In comparison with DSS, NIPT was reported to be giving higher sensitivity (72%) and providing less psychological stress for high-risk women (69%); about half (40%) did not perceive NIPT as reducing more maternal stress for termination of pregnancy. In comparison with IPD, NIPT was reported to giving more safety to fetus (89%) and less psychological stress for high-risk women (79%). About a third (37%) reported incorrect knowledge that NIPT has sensitivity as high as IPD. Significant differences in correct knowledge of the validity were found by socio-demographic and professional backgrounds: 75% male vs. 38% female \((p<.001)\), 52% university education vs. 14% high school \((p<0.001)\), 81% obstetricians and 30% nurses \((p<.001)\), and 53% public sectors vs. 37% private \((p=0.01)\). Obstetricians were more likely than nurses to be male and university-educated. The greatest ethical concerns were related to public health systems and education, including patients undertaking multiple screening tests (43%), unequal access due to high cost (39%), and patients inadequate knowledge (36%). The social issues were found to be ethically least concern, including possible increased discrimination of individuals with Down syndrome (12%). In multiple regression models, key findings of significant associations of clinical validity and utility with ethical concerns were as follows. Correct knowledge of NIPT sensitivity compared with DSS were negatively associated with increased of abortion rate \((AOR=0.57; 95\% \text{ CI}: 0.36 -0.90)\), limited autonomy among patients \((AOR=0.61; 95\% \text{ CI}: 0.37 -0.99)\), and higher level of discrimination \((AOR=0.49; 95\% \text{ CI}: 0.28-0.86)\). Perception of NIPT providing more psychological assurance than IPD was negatively associated with physicians incompetency \((AOR=0.63; 95\% \text{ CI}: 0.40-0.99)\), lack of clinical consultation with women \((AOR=0.51; 95\% \text{ CI}: 0.31 -0.82)\), and patient informed choice \((AOR=0.48; 95\% \text{ CI}: 0.29 -0.81)\).

The study findings highlight how obstetric professionals understand NIPT affects their ethical concerns about how the test are to be implemented in public health systems of antenatal care. The finding of the discrepancy in knowledge and perception of NIPT between professions (e.g., obstetricians vs. nurses, and public vs. private sectors) suggest inconsistent communications and consultations about NIPT to pregnant women in antenatal care settings. The importance of clear understanding of NIPT was noted as lack of knowledge and ambivalent views of NIPT were associated with higher ethical concerns about the test. The characteristics of non-invasive and easy-blood test should not be used to rationalize little support for the resources for physician and patient education. NIPT, a test that is easy but detects the important fetal conditions, needs more evidence-based professional training to promote reproductive health.
Cochrane Evidence: Community Wide Interventions For Increasing Physical Activity

Philip Baker
Philip R.A. Baker; Daniel P Francis; Jesus Soares; Alison L Weightman; Charlie Foster
IHBI & School of Public Health and Social Work, Queensland University of Technology
Australia
p2.baker@qut.edu.au

People who are physically active have higher levels of health-related fitness, and are less likely to develop disabling medical conditions and chronic diseases. Despite considerable evidence on the benefits of regular physical activity, global levels of physical inactivity remain very high. Multi-strategic community wide interventions for physical activity are growing in popularity globally and in the Asia-Pacific region, but their ability to achieve population level improvements is unknown. Community-wide interventions are complex interventions having multiple strategies, which act in different ways, and on different levels.

Our goal was to conduct a Cochrane systematic review to access the effectiveness of multi-strategic community wide interventions in their ability to increase population levels of physical activity. We undertook the review according to a published Cochrane protocol. Eligible interventions had to aim to reach the whole population, and to include at least two out of a possible six broad groups of interventions or strategies. We searched 26 electronic data bases with no language restrictions, and completed additional strategies. We selected cluster randomised controlled trials, randomised controlled trials, quasi-experimental designs which used a control population for comparison, interrupted time-series studies, and prospective controlled cohort studies. The primary outcome was physical activity, measured for a minimum of 6 months. All potentially eligible studies were screened and then reviewed from full-text. Studies were independently assessed for their risk of bias (trustworthiness) and data extracted by two reviewers. Data were then summarised with forest plots, narrative summary, and a summary of findings table.

The review included 33 studies. A total of 267 communities were included across all the included studies, with populations ranging from 500 persons to 1.9 million. Almost all the interventions involved building partnerships with local governments or non-governmental organisations. Twenty studies included some form of individual counselling by a health professional, 23 involved a mass media campaign and 26 included another communication strategy. Fourteen studies used environmental change strategies. Two of the studies were set in lower-middle income countries (Pakistan & Vietnam) and six included upper middle income countries. Twelve of the studies were conducted in the Asia-Pacific region, with China having the most with 5 studies.

Nineteen studies were identified as having a high risk of bias, 10 studies were unclear, and four studies had a low risk of bias. Selection bias was a major concern with these studies, with only five studies using randomisation to allocate communities. The trustworthiness of the studies has however increased over time.
Some studies with medium and high intensity interventions reported positive effects for subgroups (e.g. gender) of the population, but with no significant impact overall. For example, of the thirteen studies reporting physical activity attainment at a pre-defined amount, only one demonstrated effectiveness. High intensity interventions involving individual counselling and community involvement may have limited effects on physical activity levels, but interventions focusing on mass media campaigns did not appear to be effective. The methods used in the intense Chinese studies may be found intrusive and culturally unacceptable in other settings.

This review provides findings of an absence of benefit of multi-component, community wide interventions to increase physical activity levels across the whole population, although some sectors may benefit. Many of the studies provided reasons for their apparent failure. The evidence shows that simply combining various strategies does not necessarily result in increased physical activity.
Most people who smoke started before the age of 18. If children are prevented from starting to smoke they may be able to avoid a lifetime of addiction, poor health and socio-economic costs. The family setting provides an opportunity to influence children in their decisions not to smoke, and accordingly family based prevention programs have been developed. Public Health decision makers require trustworthy, robust evidence of effectiveness to determine whether these family programs should be implemented. Systematic reviews provide the highest level of evidence for health care decision making.

Our goal was to conduct a Cochrane systematic review to access the effectiveness of multi-strategic community wide interventions in their ability to increase population levels of physical activity. We undertook the review according to a published Cochrane Protocol. We searched 14 electronic data bases with no language restrictions up to April 2014. We also undertook Internet searches, websites and hand searched key journals. We selected randomised controlled trials (RCTs) of interventions with children and adolescents (ages 5 to 18) and families aimed at preventing tobacco use. The primary outcome was the smoking status from a baseline of never smoking, measured for a minimum of 6 months. All potentially eligible studies were screened and then reviewed in full-text. Studies were independently assessed for their risk of bias (trustworthiness) and data independently extracted by two reviewers. Studies with sufficient data were pooled using a Mantel-Haenszel fixed effect model. Twenty-seven RCTS were included: 23 in the USA, and one each in Australia India, the Netherlands and Norway. The included studies varied in their focus and approach. Fifteen studies focused on preventing substance abuse and only six focused solely on tobacco addiction. The duration and the follow-up varied between 6 months to 29 years. Nine studies comparing family based programs against a control were pooled in the meta-analysis. The results showed a significant benefit (risk ratio [RR] 0.76, 95% confidence interval [CI] 0.68 to 0.84) in preventing starting smoking between 16 and 23%. Three studies provided data considering family-based interventions as an add-on to a school based program were pooled and showed the add-on to be also effective. The two studies restricting to never users reduced smoking starts by 15% (RR 0.85, 95% CI 0.75 to 0.96). This review shows good evidence for studies at moderate risk of bias for family programs preventing children and adolescent from starting smoking. The most useful strategies are those which: encourage parents to think they can make a difference in their adolescents tobacco-related behaviour, strengthen nurturing skills, set limits, and provide strategies for a meaningful discussion about substance use. This review found family-based interventions are effective either on their own, or in combination with a school-based program. Cochrane systematic review methodology can help identify potentially useful public health interventions for implementation.
Odisha is one of the poor performing states in India terms of maternal health status. Presently the state MMR is far behind target as against national MMR 212. MMR is a key indicator according to MDG targets for the measurement of maternal health status of a state. Challenge before state is to reduce maternal mortality to meet MDG targets. MDR as a strategy has been spelt out clearly in the RCH-II/National Programme Implementation Plan document. It is an important strategy to understand the causes of maternal death and work on the gaps, to improve the quality of obstetric care and reduce maternal mortality and morbidity. MDR provides detailed information about various facts at health facility and community level related to maternal death. Analysis of these deaths helps to identify level specific delays that contribute to maternal death and guide concerned stakeholders to improve upon existing service delivery practice.

The central objective of the study was to closely examine the process of recording maternal deaths in the target districts to understand the relevance of MDR in the state, share experience among key stakeholders with regard MDR and discuss the opportunities available for effective MDR process and possible support between the stakeholders. The documentation of findings were carried out following field visits to target villages where maternal deaths occurred during the target period i.e. December 2013 to March 2014. The exercise was designed to raise awareness amongst family members on their obligations with regard to maternal health.

Carefully structured field operational tool for social autopsy of target maternal deaths was drawn out under 18 headings starting from personal identification details of the deceased woman with exact date/time/location of death. The exact time during the pregnancy when the death occurred was recorded with reference to antenatal period/during delivery/within 42 days after delivery/following miscarriage/following induced abortion. In case maternal death occurred before or during delivery, number of weeks of pregnancy at the time of death was recorded (<16 weeks/17-28 weeks/>28 weeks). In addition, date of investigation at the residence of deceased & names of respondents were recorded indicating their relationship with the deceased and exact time of their attendance immediately before maternal death either at residence of the deceased or during transportation from residence to the target delivery facility or following admission into the facility. The exact time to time communication between the facility staff treating the pregnant woman and near relatives closely observing the patients running condition, were recorded. In every maternal death the official documentation certifying death mentioning all relevant clinical details leading to death were critically examined. However where the official death certificates were not available at all, sincere efforts were made to examine the patients hospital admission record for antecedent causes leading to death. The MDR study took into account all relevant clinical/pre-death data in all
20 cases studied in this exercise. The relevant findings were treated statistically on SPSS system and analyzed for relevant findings. Sample size: 20.

Response elicited from best respondents were analyzed with regard to family information/social background, perceptions of those who closely observed of each death, details of the pregnancy care just before death and service delivery in hospital after admission. Socio demographic variables were recorded and analyzed. 3 deaths occurred in schedule caste household. The type of family where maternal death occurred were mostly nuclear families with illiterate educational background. Most mothers (55%) who died did not have any formal education and belonged to Below Poverty Line (BPL) category. Most of the deceased mothers (70%) had Public Distribution System (PDS) cards. Out of 20, 18 (90%) deceased mothers received Supplementary Nutrition during the course of pregnancy. None of the women had access to toilet at home. Very few women were members of SHG, Panchayat, Cooperative bank or any organization, 84% were homemakers. Other relevant details are:- the deceased mothers were within the age (17-35) years. Month of death- all months at least 1 death/ September-5. The incidences of maternal death in 2013 was 17; one each in 2012 & 2014. Best respondents were husbands for 14 MDs (73.7%). Second preferred respondents (37%) were in-laws. 36.8% of dead women were married before age of 18. Deaths were less in women married later (20-21) years. The places where maternal deaths occurred were recorded and analyzed. 52.6% died at home, 15.8% died at sub-divisional hospital, 15.8% died at District Headquarter Hospitals, 5.3% died at accredited Pvt. Hospitals, 5.3% died on unaccredited Pvt. Hospitals. The study showed maximum maternal deaths occurred at home. The exact time when each maternal death occurred was recorded and analyzed as per the finding, 42.1% mothers died during antenatal period. 5.3% died during delivery and the largest number of mothers (47.4%) died within 42 days after delivery. 5.3% died within 6 hours after delivery. Venue/frequency of ANC was recorded and analyzed interestingly 63.2% pregnant women attended 3 ANC whereas 26.4% cases attended 1 to 2 ANCs. 10.5% women attended more than 3 ANCs but still died. Analysis of places of antenatal checkups maximum mothers- 42.1% visited VHND (Village Health and Nutrition Days). 22.2% of mothers visited PHC/CHC for checkup. Only 10.6% of mothers visited Sub-Division/District Headquarter Hospital for the purpose. 5.3% of mothers attended private hospital accredited for the purpose. Accountability indices of village level health workers (ASHAs/AWWs/ANMs/HWs) was accessed and as per record 42.9% of the health workers informed the family about danger signs in respective mothers in 2 districts whereas in other 2 districts the advance warning regarding possible dangers of child birth was not reported to the family members at all. 57.1% of health workers detected emergency signals in good time and advised the family accordingly. However in 1 district, none of the health workers were able to detect emergency in pregnant woman eventually died. Out of 20 9 each died at home and hospital and 2 pregnant women died during transit. The findings of the study were classified under technical/systemic/social/rights/issues, discussed in the paper.
Obesity is more than just an individual problem, it is a community problem, driving up health care costs and reducing productivity. This research strives to understand the social and cultural components that contribute to obesity in rural and remote areas of Fiji islands using Community based participatory research (CBPR). Hence, communities play significant role in uplifting the health of their members by promoting healthy lifestyle. This research also opens up discussions for other researchers and policy makers to rethink how they deal with communities that have sensitive cultural issues around body size and the influence of modernization. It is hoped that the current research will guide future obesity prevention determinates in the rural and remote areas of Fiji. Such guidelines will be particularly important to the Ministry of Health of Fiji and other Pacific nations, where the prevalence rate of obesity is the highest in the world, and the complications from obesity is a major burden on health care resources: to understand the factors that influence current food practices, physical activity levels, and behaviours contributing to obesity; to explore how rural social networks may be beneficial in preventing obesity; to explore the social cultural factors related to food, physical activity and behaviours, as well as the attitudes, beliefs and values concerning obesity among Fijian rural and remote community.

The methodology for the current research is community based participatory research (CBPR); it includes community development, community engagement, the building of community health through inclusive partnerships, and community empowerment, in context of the indigenous community in rural and remote Fijian Islands. The mixed method design was utilised for this CBPR intervention study. The approach is best suited for this kind of research because neither the quantitative nor qualitative method alone is adequate to answer the questions framed for the research. The sample size was 106 which included participants age 17 years and over. Quantitative data was collected using WHO STEPS survey to determine the general health characteristic of the community. Qualitative data was collected using semi structured interview using purposeful selected participants with body mass index (BMI) greater than 30.

106 participants took part in this study. This is descriptive analysis of the study. Participant had their height and weight measured and questions were asked based on the WHO STEPs survey form. The gender distribution in the community is even with males comprising of about 51% of the total population while females made up 49% of the total population. Around 3% of the total population has not completed their primary schooling. The percentage of people who completed their primary and secondary school is 41.5%. The number of people who completed their high school is 12.9% and the about 2.9% of the people passed their college/university. The income range is 49% of the people earns less than 2000 a month. Following that is the income range on 2000-4000 which comprises of 28.3% of the total population. The people in the 4000 to 6000 income range are 12.3%.
earning 6000-8000 a month is 3.8% while people earning 9000 or more are 6.6%. The data designate that 7.5% of the daily smokers are not currently smoking while 92.5% of the smokers are currently smoking and 37.1% of the people consumed alcohol in the past while 62.9% of the people did not consume alcohol in the past. The data show that 16% of the people have normal BMI while 34% are overweight and 50% are Obese. 11 males and 6 females had normal BMI while 25 males and 11 females were overweight. 18 males and 35 females were obese. The research shows that 3.7% of the people spent 20 minutes per day on vigorous sport. 37% spent around 30 minutes per day while 3.7% spent 40 minutes per day on vigorous sport activities. 3.7% of the people spent 45 minutes while 7.4% spent 60 minutes per day on vigorous sport activities. 11.1% spent 90 minutes and 25.9% spent 120 minutes per day on vigorous sport activities. 7.4% of the people spent 180 minutes per day on vigorous sport activities. This data also signals indicates that the number of people recently diagnosed hypertension in the past 12 months is 67.9% while those who did not have high BP was 32.1% where as 61.1% had latterly diagnosed diabetes in the past 12 months while 38.9% did not have diabetes in the past twelve months.

This data suggest that health care professionals fail to conquer rural communities collaboration as to inform about health promotion and disease prevention approaches. Certain facts about constructing suitable choices, communities have the opportunity to deed to meliorate their health. With the help of health care personnel, people can engage in behaviours that prevent the onset of chronic conditions, or delay complications of conditions they have already developed. However, they need knowledge, motivation, and skills to cope with lifestyle changes, to change hazardous work environments, to stop using tobacco products, to increase physical activity, to get health literacy, to eat healthy foods, and to engage in physical activity. Prevention and health promotion should be part of every health care encounter, but this is far from routine clinical care.
Consumption Of Unhygienic Snacks And Beverages, Nutritional Status And The Incidence Of Appendicitis Amongst Children In Yogyakarta: A Case Control Study

Hanum Atikasari; Susetyowati; Akhmad Makhmudi
Department of Nutrition and Health Universitas Gadjah Mada Indonesia
hanum76@gmail.com

Appendicitis is the most common cause of acute abdominal pain that requires surgical intervention during childhood. Obstruction of the appendiceal lumen and hyperplasia of the lymphoid follicle is the common cause of appendicitis. Bacterial and viral infections have been investigated as a possible cause. Poor sanitation, personal hygiene, contaminated food, drink, and nutritional deficiencies alter immunocompetence and increase the risk of infection.

To determine the association between unhygienic snacks and beverages, nutritional status and the incidence of appendicitis amongst children in Yogyakarta

A case control study was conducted among 114 children aged 6-15 years old. In the case 57 children underwent appendectomy over the last three months at a number of hospitals: Sardjito Hospital, RS Khusus Anak 45, RS PKU Muhammadiyah Yogyakarta, and RSKIA Bhakti Ibu. Meanwhile, the control was children who had never been diagnosed with apedicities, who lived in the same area of the case group and who were matched by sex and age. We used Beverages and Snacks Quesionaires (BSQ) to assess the frequency that unhygienic snacks and beverages were consumed. The list on BSQ were collected from a previous observational study of some street vendors around schools in Yogyakarta. Childrens weight and height were measured as well as observed hygienic-practice. We used logistic regression to analyze the Odds Ratio (OR).

Most of the children suffering from appendicitis consumed unhygienic beverages and snacks more than 5 times per week (88%). Moreover, the prevalence of undernourished children (68%) and lack of hygiene practice (71%) are higher among the cases group compared to the control group. In univariate analysis, nutrition status (OR=2.60; 95% CI=1.02-6.65), hygienic-practiced (OR=3.04; 95% CI=1.08-8.51) and consumption of unhygienic snacks and beverages (OR=3.30; 95% CI=1.25-8.68) were significantly associated with appendicitis. Whereas, in multivariate analysis only nutritional status (ORa=2.48; 95% CI=0.88-7.06) and consumption of unhygienic snacks and beverages (ORa=2.72; 95% CI=0.90-8.25) were significantly associated.

Nutritional status and unhygienic beverage and snack habit contribute to the incidence of appendicitis amongst children in Yogyakarta. Nutrition awareness needs to be raised to improve the health status of children. In addition, schools have to establish healthy cafeterias to control food consumption options for the students.
Contraception Among Pregnant Adolescents: Findings From A Rural Setting In Sri Lanka

Ishanka A. Talagala
Ishanka A. Talagala; Keerthi M. Kodithuwakku
Regional Director of Health Services-Ampara, Sri Lanka
Sri Lanka
drishanka@gmail.com

Pregnancy during teenage poses direct health risks to both the mother and child. This study aimed at describing the knowledge, attitudes and practices related to contraception among pregnant teenagers in a rural setting in Sri Lanka.

A community-based, cross-sectional study was conducted in 2013 among all teenagers (aged <20 years) registered for field antenatal care in the Regional Director of Health Services division-Ampara, Sri Lanka (n=157). Knowledge, practice based on weighted scores and attitudes on contraception were assessed using an interviewer-administered questionnaire. Descriptive summary statistics were used for analysis.

Mean age was 18.2 years (SD=0.85). Nearly 90% (n=141) had heard of contraceptive methods, 21% (n=33) could name 4 different methods but 33% (n=52) failed to identify the method when shown. Only 63.7% (n=100) claimed that contraception was suitable for sexually active girls. Of them, 41.6% (n=37) selected oral contraceptive pills (OCP) as the most suitable method. Of the 12.7% (n= 20) who claimed contraception was not suitable, 44.4% (n=8) said that its consequence would be subfertility. Based on 12 marks as cutoff (range -3 to 26), 73.2% (n=115) were with poor knowledge on contraception. Overall positive attitudes towards contraception was seen in 50.4% (n=79).

In 65% (n=103), current pregnancy was unplanned. Among them, 65% (n=67) were not using any contraceptive method. Of the rest (35%, n=36), 68.4% (n=36) used OCP. Main reasons for their failure in contraceptives included forgetfulness (60.5%, n=23) and partner not supportive (26.3%, n=10). Majority (95%, n=97) had never used emergency contraceptive pills. Based on 6.00 marks as cutoff (range -5 to 7), 73% (n=75) had poor contraception practices among unplanned pregnant adolescents.

Despite having positive attitudes towards contraception, knowledge and practices related to it among pregnant teenagers was poor. Since teenage was identified as a vulnerable group for unmet need in contraception, mechanisms should be further developed to reach-out to them.
Coping Mechanism Among Adult Injured Survivors After West Sumatera Earthquake, Indonesia, 2009

Mondastri K Sudaryo
Mondastri K Sudaryo; Renti Mahkota
Dept. of Epidemiology, Faculty of Public Health (FKM), Universitas Indonesia
Indonesia
maqo19@gmail.com

On September 30, 2009, a strong earthquake, with magnitude of 7.6 RS severely hit West Sumatra Province. As per October 28, 2009 it was reported that 1,117 people had died and 3,515 people had injured. More than half of the injured victims required further follow-up of care. In addition to medical rehabilitation for physical disability among the injured, many survivors might need special attention due to their psychological stress disorder after this traumatic event.

To know coping mechanism among adult injured survivors after West Sumatera earthquake, Indonesia, 2009. Qualitative study design was used to achieve the study objective. Data was collected through in-depth interviews. Twelve key informants were purposely selected from community members, formal and informal leaders.

A year after the earthquake, informants did not complain about prolonged repeated traumatic memories or anxieties. They did not avoid talking about the traumatic event and can accept the current conditions. They did not become irritable and their memories did not affect their concentrations when doing their works. They admitted that there were emotional distresses (like being sad and crying) due to the psychological impact, right after the earthquake. However, most of them perceived that the event was a live trial, a test and a warning from God that should be faced. As human being they believe that they just had to be tough, accepting the trial and to get closer and surrender themselves to God. To respond the difficulties during and after the disaster impact, in addition to the role of faith (in God), caring within family members, especially from the head of the family was also important. Community members the affected community were helping each other, but it was rather limited. Up to the time of interview, support and aid from the government to manage recovery in the community was felt to be not adequate. On the other hand, NGO was felt to be more responsive in giving support than the government.
Climatic and environmental factors play an important role in the breeding and dispersion of the Aedes mosquito, a primary vector of Dengue Fever. By monitoring these factors, it is possible to predict the emergence of a dengue endemic and subsequently reduce its spread. Factors such as rainfall, relative humidity, temperature and population density and its effect on the dispersion of dengue has been widely investigated by many previous study. However, the relationship between air quality and dengue cases has barely been explored. In this study we aim to investigate if there is a relationship between the air quality and the number of dengue cases in an area.

This study was conducted to investigate the correlation between the Air Pollution Index (API) and the reported number of dengue cases in five districts. Data of the API and the number of dengue cases from five districts in the state of Selangor in the year 2013 and 2014 were obtained from the Malaysian Department of Environment website and the Malaysian Ministry of Health website respectively. Average API readings for each week were assigned to either good (<50), moderate (50-100) or unhealthy (>100) and the total number of cases in each district that fell into either one of these API categories were summed up.

Cumulatively, in 2013 and 2014, 66.5% of dengue cases were recorded when the API reading were within 'Good' levels while 31.8% and 1.7% of cases were recorded while the API reading were within 'Moderate' and 'Unhealthy' levels respectively. Spearman's correlation, test and significance testing were carried out between the API categories and the number of recorded dengue cases in the five districts. The results were $R = -0.532$ with a p-value $(0.002) < 0.01$ (n=30). These results show that there is a statistically significant negative correlation between the dengue cases and the API value. In conclusion, the significant relationship between the API values and the recorded dengue cases suggest that an increase in the API levels causes a decrease in the number of dengue cases. This could be due to the presence of smog, dust particles and other particles that disrupt either the breeding or feeding pattern of the dengue vector.
Correlation Between Carbohydrate Composition, Glycemics Index, Glycemics Load And Other Factors With Post Prandial Blood Glucose Level In Diabetisi Persadia Depok

Trini Sudiarti
Rodlia; Trini Sudiarti
Faculty of Public Health Universitas Indonesia
Indonesia
trini@ui.ac.id

Carbohydrate intake is one of the strongest predictor for blood-glucose level, so one of the diet therapy for diabetesi is providing carbohydrate ingredients for about 45-60% from daily total energy intake with low glicemics load.

The purpose of this study is to find the relation between carbohydrate intake, glycemics index and glycemics load and other factors with blood glucose level Diabetisi in Persadia Depok. This is cross sectional study, done in February-March 2014 in Depok. Post - prandial blood -glucose is the dependent factor and independent factors are carbohydrate intake, glycemics index, and glycemics load, age, BMI, physical activity, energy intake, fat intake and fiber. The data taken by measuring BMI, post- prandial blood-glucose, questionnaire, 1x24 hour food recall and 2x24 hours food record. The analysis were univariate, bivariate (simple linear regression) and multivariate multiple linear regression.

The average of post prandial blood glucose were 164.49 mg/dl. The bivariate analysis found a significant correlation between carbohydrate intake (p=<0.001), glycemics load (p=0.006) and age (p=0.004). Carbohydrate, age and physical activity joint to the multivariate model:

Blood glucose = 164.76 + 0.344 age + 0.004 physical activity + 0.172 carbohydrate

Numbers and the highest gain of plasma glucose are depend on time, quantity and the food composition. Post prandial blood-glucose in influenced by the absorption of carbohydrate, insulin secretion, glucagon secretion and glucose metabolism in liver and perifer. Post prandial blood-glucose concentration increase after 10 minutes of eating, as the result of carbohydrate absorption. Not only carbohydrate intake that has influenced of the post prandial blood-glucose, but also age. Happened as the results of the insulin sensitivity decreased function of the pancreas cell beta.

Carbohydrate intake, age and physical activity are dominant factors correlated with post prandial blood-glucose level. From the results, a complete research about glycemics index for Indonesian ingredients must be done, for the single or mixed ingredients for diabetes type 2 patients.
Correlation Between Hpv With Two-Year Survival Of Oral Cancer

Denni Joko Purwanto
Denni Joko Purwanto; Asri C. Adisasmita; Jauhari Oka Reuwpassa
RS Kanker Dharmais
Indonesia
oka802@gmail.com

Oral cancer is one cancer with poor prognosis; there are various treatments to prolong survival patients.

The aim of this research was describe the proportion of HPV infection in oral cancer. This study design was use cohort retrospective. Subject was patients with oral cancer from 2006-2013 and had paraffin block that stored in Anatomic Pathology Department. We used Polymerase Chain Reaction (PCR) to examine HPV mutation. The data was analyzed using univariate and bivariate model, survival analysis used Kaplan Meier.

The number of subject was 31 patients, average age 41.7±12.9 years, sex proportion higher in man (47.1%), the most common location was tongue (70.6%), advance stage (61.8%), well differentiated (55.9%), and there were no HPV16 mutation detection but about 29.4% HPV18. There were no statistically significant between every independent variable and survival oral cancer, but sex has the highest hazard ratio. We can do further research especially about causalities of HPV and oral cancer, prevention, prognostic and targeted therapy in oral cancer patients with this result.
Creating Conducive Policy Environment To Support Exclusive Breastfeeding:
An Experience In Special Province Of Jakarta, Indonesia

Hadi Pratomo
Hadi Pratomo; Pradnya Paramita; Endah Hartati; Erna Karim; and Linda Darmayanti
Faculty of Public Health, Universitas Indonesia
Indonesia
pratomohadi@gmail.com

The Convention of the Right of the Children (1990) stipulated that optimum growth and
development is one of the rights of the children. Receiving breast milk for each child is a mandatory
need which has to be fulfilled by his or her mother. In the developing countries exclusive
breastfeeding saved the life of 1,5 million babies yearly. In 2001, WHO recommended extending
exclusive breastfeeding from 4 to 6 months. Since 2003, the Government of Republic of Indonesia
adopted this policy.

Although exclusive breastfeeding turns out to be beneficial to all children, the coverage of exclusive
breastfeeding in this province remains unsatisfactory. In the National Action Plan of Nutrition of the
Ministry of Health (MOH) it was targeted the coverage of exclusive breastfeeding for babies
between 0-6 months was 80%. In 2011, in this province the target coverage of the exclusive
breastfeeding was only 62.1%.

Based on Health Law No 36 (2009) article 129 it was stipulated that the government is responsible to
devise a public policy which assures the fulfillment of each infant to receive exclusive breastfeeding
from his or her mother. This was further endorsed in the government regulation (PP No 33, 2012) in
which the province government is primary responsible to implement the national policy on exclusive
breastfeeding for 6 months for each baby. The Provincial Health Office (PHO) has the obligation to
provide supportive environment to support the exclusive breastfeeding policy. Therefore, there was
a need to devise a draft of policy paper for the Plan of Provincial Regulation (Raperda) namely
Naskah Akademik Raperda Pojok Laktasi.

Based on the government law no 12 (2011) concerning development or creation or establishment of
provincial regulation (Perda propinsi) was on Part 4 of the guideline. In article 33 it is stipulated that
the Perda propinsi must include the following: 1) Background and the objective of the regulation, 2)
Target of regulation that will be achieved, 3) Basic ideas, scope and subject which will be regulated
by regulation, and 4) Both coverage and direction of the proposed regulation. All of the said
requirements must be put in a policy paper (Naskah akademik). Therefore, the goal of this project
was to create a conducive environment to support the existing exclusive breastfeeding policy.
Meanwhile the specific objective of the project was to prepare a draft of academic policy paper
(Naskah akademik) for planning provincial regulation (Raperda) concerning Lactation of
breastfeeding room in public places.

The Provincial Health Office (PHO) of the Metropolitan of Jakarta requested a technical assistant
team from the Faculty of Public Health, Universitas Indonesia (FPH UI) to prepare a draft of the
above required academic policy paper. To respond to this request the Dean of FPH UI established a
multidisciplinary team of experts consisting of 5 persons with different professional backgrounds namely a public health and a health facilities managers, a lawyer and two social scientists. Based on the existing regulation there were two (2) methods of developing such policy paper i.e. empirical and judicial norms. The Koalisi ASI Jakarta Network (the Breastfeeding Coalition of Jakarta) provided technical input and suggestions to the appointed team of FPH UI during preparation of an initial draft of the paper. The breastfeeding Coalition consisted selected professional organizations concerned with exclusive breastfeeding such as IDAI (Indonesian Pediatricians Association), IBI (Indonesian Midwife Association), IKLI (Indonesian Breastfeeding Counselor Association), nongovernment organizations for example Perinasia (The Indonesian Perinatal Society), Sentra Laktasi Indonesia (Indonesian Lactation Center) and selected individual breastfeeding experts. The draft was eventually discussed during a special workshop attended by relevant stakeholders i.e. PHO, Provincial Social Office, Biro Hukum Pemda (Law Bureau of the Provincial Government), a resource persons from the local legislative members (Komisi Kesra, Welfare Commission) and members of Jakarta Coalition on Breastfeeding.

Based on by-law guideline to prepare a policy paper a draft of Raperda Laktasi (Provincial Regulation Plan) concerning Lactation or breastfeeding in public facilities or companies was prepared. This document consisted of 6 Chapters namely Chapter 1 Introduction which included background information, identification of problem, goal, benefit and method, Chapter 2 Both theoretical and empirical reviews (review of relevant theories, review of implementation practice, condition and problems review of norms, and implication of the regulation towards both community and state budget, Chapter 3 Evaluation and review of existing related regulations including both horizontal and vertical harmonization of the proposed regulations, Chapter 4 Basic philosophy, sociological and judicial views (way of life, way of thought, deep philosophy, needs of both community and state, assuring of equality in both laws and justice), Chapter 5 Coverage, direction of regulation and scope of materials (target audience, direction of coverage and scope of work), and finally Chapter 6 Closing.

Due to limited existing funds, review of study using primary data have not been completed. The primary data required to be able to operationalize some conceptual thoughts used such as what will be the limited number of employees of a company or office liable for this proposed regulation. For example what kind of public service area or private company requires to have a Pojok laktasi. It was also found existing inconsistent terms used in this study such as Pojok ASI or Ruang Laktasi. It is also strongly recommended to conduct harmonization of the proposed regulation.
Cross-Cultural Adaptation And Psychometric Assessment Of The World Health Organization Health And Work Performance Questionnaire Among Malay Speaking Office Workers

Muhamad Hazizi Muhamad Hasani
Muhamad Hazizi Muhamad Hasani; Victor Hoe Chee Wai; Karuthan Chinna
University of Malaya, Kuala Lumpur, Malaysia
Malaysia
muhamadhazizi@gmail.com

The Health and Work Performance Questionnaire (HPQ) is an instrument commonly used to estimate workplace costs of any health problems occur among workers that can be relate to lower job performance, sick absenteeism, and accidents and injuries at workplace. This is a report on the translation, adaptation, and validation of scores on a Malay-speaking version of the Health and Work Performance Questionnaire.

This study aims to cross-culturally adapt the Health and Work Performance Questionnaire (HPQ) into a Malay-speaking version by guided translation and adaptation method. Then the reliability and validation scores of this Malay version of HPQ are assessed for use among office workers in Malaysia.

The implementation of cross-cultural adaptations of this instrument was done according to guidelines. Forward translation of the HPQ into Malay language was done by two professional translators followed by panel discussion to reach an agreement on one common translation. Backward translation was then completed by another two bilingual translators. The translated HPQ was then pre-tested on 20 office workers followed by face-to-face interviews to assess their understanding of the instrument. The face and content validity were verified by consensus obtained from the expert panel on the understanding and relevance of the translated instrument. After that, psychometric assessment was completed by analysis of self-administered questionnaire on 300 office workers. The internal consistency was assessed using Cronbachs alpha coefficient. Underlying factor structure was identified using exploratory factor analysis where two-factor structure was concluded. Construct validity was then evaluated for the HPQ for two-factor structure using confirmatory factor analysis (CFA). Test-retest reliability was assessed using intra-class correlation coefficient (ICC) estimates. Thirty (n = 30) respondents were selected from the initial pool of participants (N = 300) after a two-week interval. Sample population was taken in few selected offices around Selangor and Putrajaya in Malaysia. Participants were a mix of male (25.3%) and female (74.7%), ranging in age from 20 to 58 years old with a mean age of 33 years old. Based on the psychometric properties assessment, the internal consistency of the Malay version HPQ were adequate (Cronbachs alpha = 0.78 and mean inter-item correlation = 0.53). Exploratory factor analysis and confirmatory factor analysis suggested that a modification of the Malay version of HPQ provided best fit estimates to the sample data.

The Malay version of HPQ was shown to have adequate reliability and validity as an instrument in the study sample.
Culture And The Low Utilization Of Safe Motherhood Services Among Raglai Ethnic Minority People In Vietnam

Doan Thi Thuy Duong  
Doan Thi Thuy Duong; Bui Thi Thu Ha  
Hanoi School of Public Health  
Vietnam  
dttd@hsph.edu.vn

Vietnam was one of the 10 countries reached the Fifth Millennium Development Goal (MDG5), reduce 75% of maternal mortality rate from 1990 - 2015. However, the disparity in health outcomes of women and children between geographic areas, levels of socio-economic, education, ethnics still continue to increase.

To know culture and the low utilization of safe motherhood services among Raglai Ethnic Minority People in Vietnam. Two communes had mainly Raglai people, an ethnic minority group in poor mountainous areas and had the lowest utilization of services in Ninh Thuan province were purposely selected to gain knowledge on culture and perception on safe motherhood services. A total of 22 IDIs and 8 FGDs with Raglai woman, health workers and local authorities were conducted in September 2012.

Frequently side effects of IUD, a long-term method subsided by government, made a women, a breadwinner in matrilineral society feel weak and being less productivity. There were no room for practicing traditional customs in delivery such as delivering in squatting position, drinking their own traditional herbs, protecting and keeping warm by the fire. Over-medication of episiotomy, or unfamiliar and uncomfortable with equipment at health facilities supported for home delivery. People only sought for maternal health care services in complicated situation that need to refer to higher level, thus, reduce the trust of people at primary health care system. Those suggest that maternal health care services should be adapted to be more appropriate with culture of Raglai ethnic people.
Decentralization Of Healthcare Programs In Indonesia: A Case Study Of Developing Two District Autonomous Healthcare Acts In Central Java

Suprianto Rijadi MD,PhD
Suprianto Rijadi MD,PhD
Faculty of Public Health, Universitas Indonesia
Indonesia
srijadi08@gmail.com

Indonesia administratively is divided into 304 Provinces and 505 Districts, and around 10,000 subdistricts. Politically, since Independence day in 1945 to early 2000 the Government adopt Centralization system to run the country. The concept of decentralization started to be implemented in early 2000 with the implementation of Local Government Act 2004 no 32, and later this Law was refined further into Local Government Act 2014 no 23.

According to the Local Government Act 2014 no 23 the power of Central Government is limited to the Province levels, and the Provincial Government act as an extension of the Central Government. The District Government is the only autonomous government according to the this Law. District Government can run 6 autonomous programs, which are considered as basic rights of the population, i.e: Education, Health, Social programs, Environment, Housing, and Security. District implementation of the six programs, i.e: Planning, budgeting, and monitoring/evaluation of these programs are coordinated by the Provincial Government. To enact the law into effect the District Government should build District Healthcare Act which regulates all healthcare activities and programs in the Districts.

This paper will summarize the development of Autonomy concept in healthcare program to discuss the relationship between Central and Local Governments, and look in depth into the concept of Local Government Act 2014 no 23 and how this Act will changes the implementation of healthcare activities in Indonesia.

Although the Local Government 2014 no 23 has been around for one year, only a few of Districts developed the the District Healthcare Act. Our Team assisted two Districts in Central Java Province, which are Wonosobo (rural) and Pekalongan (urban), developed the District Healthcare Acts. Several benefits is recorded: a) Integration of District healthcare organizations, i.e: District health Office, District Hospital and Subdistrict Healthcenters; b) The District healthcare Act can be used as a tool to plan the 5-year and Annual Plan of District health programs; c) As a guidance for healthcare financing at the district level; and d) As a tool for developing multi sectoral approaches in healthcare programs. Some experiences from developing District Healthcare Acts in Wonosobo and Pekalongan will be used as a case study for implementation of this Act in the District levels.
Health Crisis Response consists of three phases, pre, during and post-disaster. The activities in post-disaster / recovery phase are rehabilitation and reconstruction, conducted to assess the level of damage, loss and needs of the health sector. Center for Health Crisis as a coordinator in the response to the health crisis in the Ministry of Health, has strategic role to be able to conduct assessment for the damage, loss and need of recovery for the health sector in the post-disaster accurately, so that the resources allocation will be distributed effective and efficiently. However, Centre for Health Crisis, not yet have a system that can provide comprehensive data and information to support a decision in response to recovery phase efficiently, effectively and accurately. It is essential to design an information system of rehabilitation and reconstruction in the post-disaster for the prioritization of health facilities recovery with a decision support system (DSS).

To develop web based information system for cost estimation and recovery monitoring that can facilitate the authorities to take a decision in determining the cost calculation of damage, loss and needs, prioritization of health care facilities recovery and monitoring of recovery activities in the post-disaster.

Prototype system has been designed; applying System Development Life Cycle (SDLC) A web based information system application, which can support Centre For Health Crisis at Ministry of Health to provide information for prioritization of health facilities recovery based on the parameters, cost estimation and monitoring proses of recovery activities.
Dengue Fever Diseases Mapping Distribution And Relocation Areas In Dengue Endemic Area East Jakarta Muncipality

Artha Prabawa, SKM, S.Kom, MSi.
Artha Prabawa, SKM, S.Kom, MSi.
Biostatistics Departement Faculty of Public Health Universitas Indonesia
Indonesia
arth.ui@yahoo.com

The East Jakarta Muncipality are the one of five region in Jakarta Province Indonesia Republic. Dengue is the one of most endemic diseases in Jakarta especialy in east Jakarta. On 1960 until now dengue as the ten most killer diseases in Indonesia. Author as a researcher in Public health faculty use the GIS analysis methods for mapping and forecast the relocation area where dengue epidemic comes in endemic area. Researcher use the one decade data dengue epidemic for relocation analysis and predicted epidemic areas in each season on one decade (1995 until 2001). Climatology data and topography data are use in this research.

The Research goals is found some characteristic model for relocation area in east Jakarta and many confounding variabel related to characteristic. The mapping using arc-view 3.2x. Variabel in research are choose base primary health care report in every month. Survey method use rapid survey for primary data collection on endemic areas. the mapping use the administration stratification from village to distric.

East Jakarta have ten distric and the location in Java Island north teritory. Java Island borderer with Sunda Ocean in North and India Ocean in South. East Jakarta have 4 Million citizen in ten distric. East Jakarta have tropical climate and 2 season a year, dry and rainy. Jakarta is Center Goverment of Indonesian Republic. Indonesia is Islands Country or archipelago country, have five big island, Sumatera Island, Kalimantan Island, Java Island, Sulewesi Island and Papua Island. That is all tropical islands. Dengue Fever cause mosquitos with blooding in skin and tissues body, especialy on mouth and nose. The most victim are child and infant, the incubation time dengue fever 3 until 5 day and case fatality rate very high. National rate for dengue CFR is 32:100 it means from 100 case in one epidemic insiden 32 death.The Research Result is some characteristic model for relocation area in east Jakarta and many confounding variabel related to characteristic. The mapping using arc-view 3.2x. Model for transition for mosquitos moving around geographics area in east Jakarta municipality base on CDR dengue fever health center report. The model is like circle, zigzag line and separately areas. We can says that is Mode of Relocation and Distribution for Dengue fever in East Jakarta Municipality.
Depression, Anxiety, And Stress In ASEAN SME Workers

Paul Ratanasiripong
Paul Ratanasiripong; Edith Bell; Charlotte Haigh; Orawan Kaewboonchoo; Indri H Susilowati; Marzuki Isahak; Toai Nguyen
California State University, Long Beach
USA
pratanas@csulb.edu

As a result of the upcoming Southeast Asian regional economic integration, several potential issues may emerge among workers in the ASEAN countries, including mental health concerns. To understand the similarities and differences among workers from various ASEAN countries and ensure healthy long-term mental health of workers in the ASEAN region, a research study was conducted.

The first purpose of this study is to compare the levels of depression, anxiety, and stress among Small and Medium Enterprise (SME) workers in 4 ASEAN countries: Indonesia, Malaysia, Thailand, and Vietnam. The second purpose of this study is to determine the predictors of depression, anxiety, and stress among these ASEAN SME workers.

Participants include 2,098 SME workers (at least 500 from each country) from two industries: textile and food distribution. Data for this cross-sectional study was collected by self-administered questionnaire, including the Depression, Anxiety, and Stress Scale (DASS). Multiple linear regression analyses were used to predict the levels of depression, anxiety and stress among SME workers in each country.

For Indonesia, the mean (SD) levels of depression, anxiety, and stress are 2.34 (2.67), 3.77 (3.23), and, 4.49 (3.36), respectively; for Malaysia, the levels are 0.90 (2.54), 0.99 (2.48), and 1.15 (2.85), respectively; for Thailand, the levels are 2.75 (3.31), 2.56 (3.33), and 4.14 (3.85), respectively; for Vietnam, the levels are 1.30 (2.13), 1.41 (2.03), and 2.19 (2.47), respectively. Four predictor variables (alcohol, education, income, and perceived work environment) had significant (p < .05) correlations with depression. Four predictor variables (smoking, sleep, income, and perceived work environment) had significant correlations with anxiety. Four predictor variables (alcohol, sleep, income, and perceived work environment) had significant correlations with stress. In conclusion, during the ASEAN integration, more efforts are needed from public health professionals to help improve the mental health conditions of SME workers in the ASEAN region.
Determinant Factors Of Contraceptive Use In Jakarta

Bryany Titi santi
Bryany titi santi; Charles Surjadi
medical faculty of atmajaya university
indonesia
bryn_kezia@yahoo.com

Indonesia Demographic and Health Survey (IDHS) 201w reported that family planning program in Indonesia is stagnant. Total Fertility Rate(TFR) is about 2.6 in last dekade. Contraceptive Prevalence Rate (CPR) rise slightly about 0.8% from 2007 to 2012. There are three provinces with increasing TFR, those are Papua, West Papua, and Jakarta. TFR Jakarta increase about 49% from 1.81 (2007) to 2.3 (2012). As a capital city, it is a big problem for Indonesia because high number of people will bring several problems such as maternal and child death, infectious diseases, and poverty. So tahr, research to obtain determinant factors of contraceptive use is needed for improving the family planning program.

describe prevalence of modern methods contraceptive use in Jakarta; describe predisposing, enabling, and reinforcing factors of contraceptive use in Jakarta; to know the factors associated with contraceptive use in Jakarta

Using IDHS 2012 data, particularly Jakarta. 1561 married women totally. We analyze categorically using bivariate analysis, then multivariate analysis to obtain the factors associated with contraceptive use. In deep interview is added to explorate the problem of family planning program

CPR among married women in Jakarta is 57.1% and only 53.2% among them using modern methods. Factors related to contraceptive use are age (those who are above 19 years old), informed family planning program in primary health care facilities, family support. Family planning officer in health facilities seem only provide contraceptive services while community education is sub-distric officer responsibility. A team work and coordination sistem in family planning program is not running well. There for, young married women need to cover with family planning program. Community education about contraceptive use is a responsibility of all officers in all facilities
Determinant Of Fertility And It's Distribution In Areas With Variations Of Population Burdens In Indonesia (IDHS 2012 Data Analysis)

R. Sutiawan
Nurhalina Sari; R. Sutiawan
Department of Biostatistics and Population Studies, Faculty of Public Health, Universitas Indonesia
Indonesia
r-suti@ui.ac.id

The total fertility rate (TFR) in Indonesia is 2.6 and it is likely stagnant a long last ten years (2002-2012). Since the late 1990s, government decentralization and uneven local Family Planning (FP) commitment have resulted in a stagnant Contraceptive Prevalent rate (CPR) about 57.9% for modern methods and the unmet need is still high at 11.4%. It caused that the goal of Family Planning (FP) to improvement the quality life of Indonesian human is not reached. The stalling of fertility is impact from the fertility changes that happens in Indonesia.

The study is to describe the fertility changes that is based on areas with fertility level and FP load indicator as a population burdens indicator. Analysis using IDHS 2012 data with cross-sectional research design and 23239 samples of women who has been married. The predictors are (1) reproductive health service (source of FP services, media of FP informations, FP support); (2) socio-economic characteristics (education of woman and spouse, working status of woman and spouse, family households, woman living), and (3) woman reproductive behaviour (first age of married, first age of bearing, family size preferences, interval of fertility, child mortality, currently in union).

All of the predictors are significant, except the working status of spouse. Private contraceptive services had an odds ratio (OR) of 2.9 in the area with low fertility level and burden of FP control more than government contraceptive services, meanwhile Media exposure OR 1.3, and odds 1.9 in urban area. Socio-economic status is highest effect determinant with OR 7 in the area with low fertility level and burden of FP control. Partnerships among National Family Planning Coordinating Board (BKKBN) and ministry of health can solve the stalling of fertility through improvement for participation of FP facility networking in National Health Assurance schema and also health promotions and counseling, especially to area with high fertility level and burden of FP control.
Determinants Associated With Regular Weighting Of Under Five Children In Posyandu In Kelapa Gading Subdistrict, Jakarta, Indonesia, In 2011

Helwiah Umniyati
Helwiah Umniyati
YARSI University
Indonesia
helwiah@gmail.com

A Posyandu is an integrated health post as an extension unit of Puskesmas (community health center) providing several under-five child health programs, especially regularity of weighting every month, basic immunization and vitamin A, additional food provision. Monitoring of child growth in Posyandu is a very important activity in order to know early children growth faltering. Data of National Basic Health Research (RISKESDAS) 2010 the percentage of regularity weighing was only 49.4%.

To analyze strength of association between several potential determinants and the regularity of mothers to weight their children in Posyandu. A cross-sectional study was conducted to interview 96 mothers of under-five children randomly selected from 7 neighborhood blocks in sub-district of Kelapa Gading, Jakarta. The multivariable analysis were done to analyze strength of association (using odds ratios) between several potential determinants and the regularity of mothers to weight their children in Posyandu. Weighting 4 times or more within the past 6 months, was considered to be regular.

The proportion of mothers weighting their children regularly in Posyandu in sub district Kelapa Gading was 47.9%. The older the mothers the lesser the probability to weight regularly their children. Mothers who knows that Posyandu can provide Vitamin A and basic immunization freely for their children were 2.7 times and 4.3 times respectively more likely to weight their children regularly, as compared to mothers who do not know. Closer distance between mothers house and Posyandu gave the mothers higher probability to weight their children regularly, as much as 18.5 times, as compared to farther distance. The likelihood of working mothers to weight their children regularly, were 18.3 times, as compared to the likelihood of house wife mothers.

Mothers age, knowledge about the programs of Posyandu, distance between mothers house and Posyandu, and mothers occupation status were important determinants of likelihood to weight their children regularly in the Posyandu.
Determinants Of Food Safety Practice Among Youths: A Cross-Sectional Online Study In Kuala Lumpur, Malaysia

Alias Abd Aziz
Alias Abd Aziz; Foong Ming Moy; Wah Yun Low; Rohana Jani; Hishamuddin Abdul Halim
University of Malaya
Malaysia
iyas2000us@yahoo.com

A cross sectional study was carried out among 1178 tertiary students (98.2% response rate) at a premier university in the city of Kuala Lumpur.

This study aimed to examine the level of food safety practice and its determinants. A web-based questionnaire pertaining to knowledge, attitudes and practice related to food hygiene was emailed to 1200 registered students. The respond on knowledge, attitude and practice was converted to percentage. Score < 80% = Poor Hygienic Practice, score 80% and above = Good Hygienic Practice. For knowledge and attitude, score < 60% = Poor, score 60% - 80% = Fair and score >80% = Good. To address the objective of this study, the data were analyzed using logistic regression analysis.

There were more female students (65.9%) and mostly undergraduates (73.2%) who participated in the study. Their fields of study were Arts (42.1%), Science (37.4%), and Technical (20.5%). Majority of their parents have had secondary education. This study found that 56.8% of the respondents had unhygienic food safety practice. There was no association between socio-demographic characteristics, year and field of study with food safety practice among the respondents. There was also no significant association between knowledge and food safety practice. Only respondents attitude was significantly associated with food safety practice. Respondents with fair and good attitude on food safety had higher odds ratio (2.76, 95% C.I: 1.82, 4.19 and 6.41, 95% CI: 2.85, 14.36 respectively) for hygienic practice compared to those with poor attitude.

These results warrant the need for further educational programs in creating greater awareness of food hygiene practice especially focusing on positive attitudes among Malaysian youths.
Determinants Of Periodontal Health Among Pregnant Women In Developing Countries

Gayatri, Rara Warih
Gayatri, Rara Warih
Universitas Negeri malang
Indonesia
rarawg@yahoo.com

Periodontal disease has been significantly associated with adverse pregnancy outcomes. Therefore, improving periodontal health status among pregnant women is an urgent need. Understanding the possible risk factors of periodontal disease is useful to achieve optimal protection. However, the studies which explore risk factors of periodontal health in systematic review format are not yet available. Hence, discussing risk factors of periodontal health among pregnant women in developing countries in a single framework is valuable.

To explore the determinants of periodontal disease among pregnant women in developing countries. Besides, it also aimed to recommend strategies to improve policies on periodontal health among pregnant women in developing countries. This study employed systematic appraisal which is based on systematic review methodology. The primary studies were searched from four databases: Proquest Hospital Collection, Science Direct Freedom Collection, Web of Science and Proquest Health and Medical Complete. Search terms: periodontal health OR periodontitis OR periodontal status AND preg* AND determinant* OR risk factor* OR predictor* were used to achieve 2,075 studies. The six studies were selected according to inclusion and exclusion criteria. The studies selected were conducted in developing countries which some of them are part of South of America, Asia and Africa. The full text studies were published from 2000 till date. Quantitative study design was chosen (cross-sectional and case-control study). Quality assessment was done using elements from STROBE check list. Data extraction process was conducted based on standardized quantitative data extraction then synthesis was presented in themes.

Economic status and education level of pregnant women in developing countries were significantly associated with periodontal health status. Meanwhile, demographic determinants also played important role in determining periodontal health among pregnant women: age of the mother, gestational age, multigravida history, parity and ethnicity. Dental floss and smoking behaviour was identified to have significant association with periodontal health. Health problems such as obesity, vomiting and breast problems also related to the prevalence of periodontal disease. Low dental attendance of pregnant women had significant association with high prevalence of periodontal disease.

Further research about determinants of periodontal health among pregnant women in other developing countries is required. Besides, the policy in improving oral health promotion and protection against oral disease can be improved by several recommendations such as providing equal oral health financing system, improving education level among pregnant women and integrating oral disease into national health system against chronic diseases.
Developing Flashcards As Media Communication For Immunization Program

Dian Ayubi
Dian Ayubi; Andi Sari Bunga; Andham Dewi
Faculty of Public Health, Universitas Indonesia
Indonesia
dian_ayb@ui.ac.id

Center for Health Promotion, Ministry of Health, Indonesia has developed a lot of media communication such as flashcards to improve basic immunization coverage on children.

Study aim is to explore how well audience can understand the flashcards in term messages and pictures. This study also wants to assess how well cadres and midwives can use the media.

This qualitative study was conducted in two sub districts in Gowa District, South Sulawesi. Information were collected from midwives, cadres and mother of children under five years through focus group discussion and role play observation.

The study found audience prefers pictures with bright colors. Informants can easy understand purpose of immunization that is to protect from diseases when they see the picture which is a child using a shield to avoid pathogens attack. To inform type of vaccinations, informants suggest sequence of pictures follow vaccination schedule. Informants criticize a picture which a man is carrying a child to get immunization. They argue that is a rare situation when father takes his child for immunization services. Informants prefer white uniform on health staff such as midwife and physician rather than other uniform such brown uniform for government staff.
Developing The Resilience Index Of Older Person In Perspective Of Healthy, Active, And Productive Ageing

Lilis Heri Mis Cicih  
Lilis Heri Mis Cicih; Prof. drh. Wiku Bakti B. Adisasmito, M.Sc, Ph.D; Prof. I Gusti Ngurah Agung, M.Sc., Ph.D; Ir. Hadi Sumarno. M.Sc., Ph.D  
Universitas Indonesia  
Indonesia  
mcicih@yahoo.com

Description of older person population resilience condition based on national resilience, development, and older person-related is a novelty. Comprehensively could be able to express the condition of the relative ranking of countries/territories.

This research aims to develop a resilience index of the older person population (IKPL = RIEP), as an illustration of the country/region resilience in terms of quality of the population.

Analysis was conducted on a global level as a standardized index, with a statistical validation and application at the national/provincial level. Four RIEP domains included those weighted consists of health (24%), the economy (28%), social (23%), and environment (25%).

The model can be used with KMO value of 80%, at 1% significance level (p = <0.001). This index correlates with the human development index (R = 0.93), and the index of older person (R = 0.78), at significance of 1%. The index value indicates the higher the value, the higher the resilience the older person population, with handling problems on several indicators of area-based issues. As a preliminary step, this index can be used as an alternative description of the resilience of population for further development. In addition, this could encourage the availability of older person data in the future.
Development Of Exercise For Senior Citizens By Community Participation' Community Level Health Promotion Activities In Japan

Yoshihisa Watanabe
Yoshihisa Watanabe; Junko Kashiwagi; Saori Yajima; Hirotaka Hikoi; Shizuka Motomura; Harue Kuroda; Noriko Suzuki; Manami Numata
Tokai University School Of Medicine
Japan
ihsdyw@yahoo.co.jp

It is well known that, healthy behavior, eating habit and exercise are important for health promotion. However, especially for senior citizens, exercise is rather difficult, because they have musculoskeletal problems, they cannot do it like in younger age. On the other hand, most of exercises have made for children or younger people, and it is very hard to adapt for senior citizens.

To develop new exercise especially for aged citizens. It should be suitable and familiar to certain community senior residents who have different culture to other areas in Japan. It also should be developed by community citizens.

Before this program, we conducted health promotion planning on different life stages from infant to senior by organizing community citizens. Then in this program which is to develop “Hayama Exercise” (Hayama is name of the town), we organized project team by volunteers from each life stage team, because after development of exercise to senior citizens, they want to apply it to other age groups, also. This team included a resident of specialist on exercise and sports physiology. They had meetings/practice once to twice a month, and developed each motion, step by step.

They succeeded to develop 19 motions of 14 parts by standing for rather active people, and by sitting for weak physical strength people. They also made music to adapt their exercise by asking to armature composer living in the town. They are finalizing it, and planning to train exercise leaders to disseminate new exercise to communities. They also planning to make DVD to distribute to Senior Cubs, Neighborhood Associations, Sports Clubs Association, Sports Promotion Instructors, and other related organizations.

In Japan, we have well-known "Radio Exercise" which is generalized to all people. But, it is not popular now, because music is not so fun, too strict instructions, etc. So, in the ageing society, development of community friendly exercise must be necessary.
Development Of Personnel Training Support System To Sustain UHC In An Ageing Society

Toshiro Kumakawa
Toshiro Kumakawa ; Kenichiro Taneda; Satoko Horii
National Institute of Public Health, Japan
Japan
kuma@niph.go.jp

Today aging is progressing rapidly not only in the Asia-Pacific region but throughout the whole world. In the coming decades many countries will need to urgently adopt measures to address the need for care, which will rocket due to rapid changes in the population structure, and changes in the need for medical treatment due to transformations in the disease structure. In terms of maintaining universal coverage (UHC) in an aging society, Japans experience is going to be an important living teaching resource.

Rather than trying to solve problems by sticking to the rules and using only established frameworks, it is important for us to have the ability to generate our own ideas and to cleverly repeat the process of trial and error to sustain UHC in an ageing society. A purpose of a new personnel training support system is to bring up a talented person having such ability.

In Japan, universal insurance coverage for pensions and medical treatment was introduced in 1961. Japans history after the introduction of universal insurance coverage does indeed overlap with the history of aging countermeasures. The Japanese National Institute of Public Health (NIPH) was established in 2002, as a single body integrating the Institute of Public Health, and the National Institute of Health Services Management. At the time of the merger, these organizations had already been in operation for almost 80 years, and during that time they had been involved in a great deal of on-site research in the fields of health and public health, and had also been involved in a great deal of education and training for personnel development. In this study, we analyzed the health personnel training systems carried out in the Institute of Public Health, the National Institute of Health Services Management and NIPH.

The training of human resources so far has involved the strengthening of skills related to specific constituent elements in the health care system. The specific roles of personnel responsible for health, medical, and care services differ at the central government, local government, and community levels. In order to enhance the performance of the health care system as a whole, their respective roles must have a consistent direction. From now on, it will be necessary to build a human resource training system that brings together the constituent elements needed to generate good performance of the system into a single package and strengthens the ties between the constituent elements. In order for the personnel responsible at each level to contribute toward improving health, medical, and care services, it is necessary for them to share a mutual understanding about what strategy is required for them to fulfill their roles. Accordingly, they need to have the ability to express that strategy in a common framework.
Dietary Sodium Intake And Urinary Sodium Excretion By Age Groups Among Urban Dwellers

Hazreen AM
Hazreen AM; Ameera AT; WS Fatimah; Sakinah K; Maznah D; Tin TS
University of Malaya
Malaysia
hazreen@um.edu.my

Studies have shown that sodium intake is influenced by age. However, no study had investigated this relationship in low income adult urban dwellers.

The objective of this study are to determine the difference of sodium intake, urinary sodium excretion and systolic blood pressure (SBP) according to the age groups.

A cross-sectional study was conducted among 204 respondents aged 18 years and above without any known or history chronic diseases in the two randomly selected low income housing projects (Projek Perumahan Rakyat) in Lembah Pantai and Petaling Jaya. Socio-demographic data, three days diet histories and a 24-hour urine collection were collected from the respondents. They were categorized into two groups; aged 40 years and below (40), and above 40 (>40).

62 male and 118 female respondents completed 24-hour urine collection. For 40 years (n=39 respondents) and >40 years (n=141 respondents). 144 dietary data were analysed. There is a significant difference in sodium intake (p=0.01) and SBP (p<0.001) between these two age categories. The mean value for sodium intake is 4053.7mg/day and 3505.4mg/day, whereas the mean value for SBP is 114mmHg and 129mmHg for aged 40 years and >40 years, respectively. There is no significant difference in urinary sodium excretion between these two groups (p=0.509). On average, respondents consumed outside food at least once per day. Salt consumption increases with respondents age but nonetheless, the younger group consumed more salt. Healthy dietary approaches should be tailored according to age group. Food stall providing healthy food and awareness of food handlers may contribute in achieving recommended sodium intake.
Disaster Education Through Fire And Earthquake Drill For Primary School Student In DKI Jakarta

Olivinia Qonita Putri

Olivinia Qonita Putri; Dwi Kurniati
Universitas Indonesia
Indonesia
oliviniaqp@gmail.com

Disaster is a situation which community can not handled and make people become powerless. Losses caused by disasters is very huge and serious. In 2013 losses from disasters reached 116 million US dollars worldwide. Indonesia ranked seventh place in disaster losses, about 3.13 million US Dollars. Jakarta is an area that prone to disaster. In 2013, Jakarta had 541 fire cases which is increased from 2012 that only 490 cases. Jakarta also prone to earthquake as its land structure consist of aluvial soil which is very soft and not strong enough to hold a shock from earthquake. One of the vulnerable group to disaster is children. Children didn't have physical and mental maturity which make them prone to Posttraumatic Stress Disorder. In order to reduce their vulnerability to disaster, a disaster education must held.

This studies aims to search effective disaster education for primary school student in DKI Jakarta. The method of this study was made by combining the study of literature contained in international journals, national, other sources and the fact that there is, as a solution of the problems. Disaster response simulation model development is done by analyzing the disaster simulation reports that have been implemented and then adjusted with the aim of Disaster Education through the Fire and Earthquake Drill for Primary School to provide a simulation of fire and earthquake disaster for elementary school students in Jakarta.

Mainstreaming Disaster Risk Reduction in the school had been established by the Minister of National Education Circular number 70A / MPN / SE / 2010 as well as the making of the National Strategy for Mainstreaming Disaster Risk Reduction in Schools by the Ministry of National Education. Disaster education integrated with local curriculum, school programs and extracurricular activities.

One method that can be done in educating the disaster is a disaster simulation. By simulating a disaster, children as well as all elements of the school can understand what to do when a disaster occurs. This paper focused for disaster education in Jakarta since it's high number of school enrollment rates which could lead to effective intervention. The program will be integrated into the local content curriculum in DKI Jakarta, Jakarta Environmental Education and Culture (Pendidikan Lingkungan dan Budaya Jakarta/PLBJ) to make sure it's continuity.

Implementation Disaster Education through the Fire and Earthquake is divided into three stages, which are Pre Program, Program and Post Program. Evaluation is done by simulating a disaster once every semester. By doing this, Jakarta's primary school student will have a preparedness for facing disaster and make them less vulnerable.
Disclosure Of Food Ingredients Information

Chao-Hua Liang
Ching-Hsing Chang; Yang-Jiun Mai; Chao-Hua Liang; Kuan-Chen Lin; Shu-Chen Kao; Chi-Hung Lin
Department of health, New Taipei City Government
Taiwan (R.O.C.)
Al3533@ntpc.gov.tw

With the unfolding of Taiwan’s food safety scandals in recent years, in order for the general public to regain confidence in food safety, the government’s current food tracing management policy originated from the concept of food production and marketing chain system, from the farm to the dining table, implementing history login throughout the processes, from the source, production, to sales in order for the government to effectively control the problem.

Following the launch of the school lunch ingredients login platform last year (2014), New Taipei City expanded the scope this year by offering guidance to 27 tofu businesses in Shenken area, adopting voluntary platform sign-ups, and taking the initiative to disclose food ingredients information in order to promote food consumption information transparency.

In the second half of this year (2015), food ingredients login are expected to be implemented for tea beverage businesses, Hakka cuisine businesses, and specialty restaurants in order to include more relevant information, such as nutritional labeling, test reports, packaging material, and other transparent information that protect consumers right to know about food they consume. In addition, vendors and restaurant businesses are expected to conduct self-management through the platform. This will in turn enable the government to timely cross match databases after a faulty food ingredient has been detected and inform businesses to remove the suspicious products from shelves.
Distribution Of Autism Risk Factors In Jakarta, Bogor, Depok, Tangerang And Bekasi (Jabodetabek)

_Budi Hartono_

_Budi Hartono; Chandra Alfi; M. Rifai_

Department of Environmental Health Faculty of Public Health, Universitas Indonesia

Indonesia

butoniv73@gmail.com

Since 1943, autism has been discovered and there are currently about 35 million people with autism worldwide. Although autism has been discovered for more than 50 years ago, and there has been many autism-related research conducted by various researchers from around the world, but the exact cause of the disease is still unknown.

In Indonesia, people with autism continue to increase each. Ministry of Health reported that the number of people with autism in Indonesia in 2004 was 475 thousand people and now it is estimated that every one of the 150 children is born with autism.

The study is planned to be conducted in Jakarta, Bogor, Depok, Tangerang and Bekasi. These areas were chosen because the large numbers of people with autism. The cause of this phenomenon may be due to indirect effect of environmental change in these areas.

The aim of this study is to obtain information about the distribution of autism and the environmental risk factors associated with autism and its demographic pattern in Jakarta, Bogor, Depok, Tangerang, and Bekasi.

This research is a quantitative study using cross sectional study design which measures independent variable (Environmental Risk Factors and Demographics Factors) with the dependent variable (Autism Spectrum Disorder / ASD) simultaneously.

Population and sample in this study is households which have a child with Autism Spectrum Disorder (ASD). Inclusion criteria in this study is household with a child with Autism Spectrum Disorder (ASD), lives in Jabodetabek area for the last 3 years, and is willing to completely fill the questionnaire. To follow the research design used in this study a sample of 109 housewives was selected.

The sampling was conducted using patient list from institutions/clinics with autism therapist who is a member of the Foundation for Autism Indonesia, which is spread around in the Greater Jakarta area. Risk factors data were obtained by using questionnaire, diet table, and GPS.

The study locations are in Jakarta, Bogor, Depok, Tangerang and Bekasi. These five areas are chosen due to the similarities they have with each other, especially in terms of environmental pollution and demographic pattern, and the potential of the areas influencing each other because of the borders they share. It is expected that with these information, distribution of autism in these five areas can be obtained.

Based on the results of the mapping with Geographic Information Systems (GIS), autism cases are most prevalent in South Jakarta with 19 cases, 15 cases in East Jakarta, and 14 cases in Tangerang.
and South Tangerang City. Meanwhile for the Bekasi, Depok, Bogor City and County, and Central Jakarta there are 9 cases, 8 cases, 7 cases, and 3 cases, respectively. Even if the number seems small, we cannot make a justification on those numbers alone. Those cases are only from people who came to the health facility and have the disease recorded; just the tip of the iceberg.

For the gender distribution, the majority of people with autism are boys, which makes up 84%, and the remaining 16% are girls. This is in accordance with Frombonne study (Study Frombonne: 2003) which states that autism is known to occur four times more often in boys than in girls.

The majority of people with autism are diagnosed for the first time at the age of less than 24 months (62.7%). The rest is first diagnosed at age 25 months to 60 months and over 60 months, respectively 34.7% and 2.7%. These results are consistent with results of previous studies, in which researchers have determined that the diagnosis is reliable, valid, and a stable of ASD can be seen when the child was 2 years old. Research also shows that some of the visible signs of autism in early at the age of 12 months.

For fish consumption, it is showed that most mothers of children with autism stated that they rarely eat fish or seafood (61.3%). And 12.7% of respondents admitted that they eat fish or seafood every day, and the remaining 16% of respondents tried to eat fish or seafood every day, even though in fact they only consume seafood or fish, occasionally.

As for the vegetable consumption, it is showed that the majority of respondents admitted to eat vegetables less than 500 grams (85.3%). The remaining 14.7% of respondents claimed to consume as much as 500 grams of vegetables a day.

Data on the pesticide use showed that the majority of mothers of children with autism used pesticide to kill insects/mosquitoes (58.7%). As many as 37.3% claimed that they do not use pesticides and 4% said they do not use/ do not remember of using pesticide.

In this study, 92% of the respondents live near highway and 70% of their houses located far away from pollutant risk factors, such as industrial area, waste dumping site, paddy field, bus terminal, mining sites, and car workshop.
Distribution Of Mineral Contaminants And Community Health Profile Of Residence Nearby Inactive Nickel Mining Site In Pulau Obi, Maluku Utara Province, Indonesia

Abdur Rahman
Abdur Rahman; Haryoto Kusnoputranto; Suyud Warno Utomo; Zani Suhananto
Faculty of Public Health Universitas Indonesia
Indonesia
abd.rahman@ui.ac.id

In the mining operation some metals, metalloids, and nonmetals are released to the environment leading to pollution in air, groundwater and surface water, soil, and foodstuffs. As such, people living around mining site may expose to minerals excessively through inhalation of particulates and ingestion of drinking water and foods.

To assess human exposure to minerals and describe community health profile of residential population living at closed proximity to inactive (postponed) nickel mining site. An exposure evaluation was conducted in Kawasi village nearby inactive (postponed) nickel mining site and in Soligi as reference village in Pulau Obi, Maluku Utara Province. Exposure investigation design of ATSDR 1996 Type-1 Health Study was applied to analyze the distribution and contamination level (CL) of gases, particulates, and metals in ambient air (n = 5); essential trace metals, heavy metals, and metalloids in drinking water (n = 40), foodstuffs (n = 32), and soil (n = 10); Escherichia coli and coliform in drinking water (n = 60); and Ascaris worm eggs in soil (n = 10). All metals and ionic species in environmental media were determined using APHA, NIOSH, and SNI (Indonesia) analytical methods, while E. coli and coliform were analyzed on site using membrane filtration technique. A total of 984 respondents consisting of same number of adult males, fertile women, and school age children were surveyed to characterize anthropometric exposure factors and disease signs and symptoms. Particular metals, metalloids, and nonmetals contaminants in ambient air, drinking water, and foodstuffs have very low detection frequency where most their concentrations are far below the legal limits or guideline values with CLs less than unity, except cyanide in foodstuffs. In contrast, CLs of soil contaminants are very high ranging from 8 folds (cobalt) in Kawasi to 674 folds (manganese) in Soligi, while the highest CL of cyanide is 719 folds its reference value in carbohydrate source (rice and casava) in Kawasi. Meanwhile, CLs of E. coli and coliform in Kawasi are 43.3 and 93.3%, respectively, whereas in Soligi are 43.3 and 80%, respectively. No Ascaris eggs were identified in all soil samples. Based on the detection frequency and CL, ambient air TSP, soil metals (cobalt, manganese, chromium, zinc, lead, and cadmium), drinking water E. coli and coliform, and food cyanide could be assigned as critical contaminants in both mining and reference sites. In such environment, the top five proportion of disease signs and symptoms are respiratory disorder in children (33.8% in Kawasi, 20.6 % in Soligi), diarrhea in children (17.6% in Kawasi, 9.8% in Soligi), cramp in adult male (14.9% in Kawasi, 3.9% in Soligi), dermatitis in adult male (8.1% in Kawasi, 3.9% in Soligi), and arhythmic heart rate in fertile women (6.8% in Kawasi, 7.8% in Soligi). Proportion of respiratory disorder might be associated with with high CL of ambient air TSP, dermatitis with soil chromium, and diarrhea with E.coli and coliform. In general, community health profile in both villages are comparable but Soligi is slightly healthier than that of Kawasi.
Does TB Incidence Data In Malaysia Reflect True Burden? - Quantifying Tuberculosis Burden And Underrepresentation In Malaysia, 1990-2014

Nurhuda Ismail

Nurhuda Ismail; Awang M. Bulgiba; Sanjay Rampal; Jiloris F. Dony; Nicolaas J.D. Nagelkerke; Omar Awang

1Faculty of Medicine, Universiti Teknologi MARA, Malaysia; 2Julius Centre, University of Malaya, Malaysia; 3Disease Control Division, Ministry of Health, Malaysia; 4Faculty of Medicine, Al-Ain University, United Arab Emirates; 5Institute of Mathematical Malaysia

hudaismail@hotmail.com

Tuberculosis continues to be the leading infectious disease threat in Malaysia as the burden remains persistently high for the last thirty years. It is more alarming with recent spikes of burden following the newly intensified case finding programme introduced since year 2011, that we aim to estimate how much the national data reflects the actual burden hence objectively quantify the underrepresentation.

We applied the mathematical modelling technique to study the progression of tuberculosis transmission dynamic exclusive to Malaysian environment and characteristics, and estimated and quantified the actual number of cases hence its underrepresentation respectively. We reviewed tuberculosis pathophysiology and its transmission dynamic that best reflected reality at present which includes primary infection, endogenous reactivation and exogenous reinfection. We used national tuberculosis data from year 1990 till 2014 and constructed a deterministic compartmental model with SEIR structure and ordinary differential equation system. We took into account its unique characteristics on heterogeneity mainly age and gender. Model equilibria and stabilities were reached and analyzed. Model fitting, probabilistic sensitivity testing and uncertainty analysis were performed. Retrospective projection of the Malaysian tuberculosis cases estimated between year 1990 till 2014 were produced. The model then was compared with the observed data within similar years and further quantified how many cases were underrepresented.

The model estimated a steady and higher increasing trend of tuberculosis cases from year 1990 till 2014 between 14,032 to 22,260 cases with annual incidence rate difference between 1.0% to 5.5% than the national observed number of cases between 11,702 to 24,711 cases with similar annual incidence rate difference range respectively. Further analysis showed underrepresentation rates ranging between 0.32% to 26.84% from year 1990 till 2014. Comparison between model estimates and the national observed number of cases from year 1990 till 2011 showed an annual mean case underrepresentation of 13.49% (95% CI: 10.40;16.58). A slightly lower annual mean case underrepresentation of 13.11% (95% CI: 10.39;15.84) was estimated from year 1990 till 2014 in line with the newly intensified case finding programme introduced since year 2011 onwards. We concluded that the current Malaysian observed data has an underrepresentation of tuberculosis cases ranging between 13.11% to 13.49%. The intensified case findings effort is one of the significant national step-up responses to combat the epidemic that made this first attempt possible to quantitatively assess how truly the data reflects the burden. This knowledge discovery is imperative to objectively complement current work on disease and economic management programmes for greater impact resulting from higher rates of case detection and treatment hence reducing incidence.
Does Unintended Pregnancy Influence Maternal Health Service Utilisation In Vietnam?

Tina Lavin
Tina Lavin; David Preen
University Of Western Australia
Australia
tina.lavin@uwa.edu.au

Each year 80 million unintended pregnancies occur among women in developing countries (1). In Vietnam, 23.6% of live births were unintended in 2002 (2). Unintended pregnancies place women at risk of death and morbidity, through unsafe terminations and poor maternal care (3). Work in high income countries such as the United States has consistently shown unintended pregnancy to be associated with late initiation and inadequate use of antenatal care (ANC) (4, 5). However, few studies in low and middle income countries have considered the effects of unintended pregnancy on maternal health service use. Research from Ecuador (6) and India (7) support findings from high income countries, however work in Kenya and Namibia found no relationship between wantedness of pregnancy and the timing of the first ANC visit or the likelihood of institutional delivery (8). No studies in Vietnam have yet examined unintended pregnancy and maternal health service use.

This study examined the relationship between unintended pregnancy and maternal health service use (ANC use and institutional delivery), in a large representative sample across Vietnam. We hypothesised that women with unintended pregnancies have poorer ANC and are more likely to deliver at home.

This retrospective descriptive study used validated data obtained through the international Young Lives Study (9). Approximately 2000 children (and their mothers) were sampled from 31 communes across Vietnam using multi-stage, purposive and random sampling in 2001-2002. Translated surveys were administered to mothers through local research assistants to capture self-reported information on a range of sociodemographic, pregnancy-related and health service use information for the participants' most recent pregnancies. The Young Lives Study was approved by the London School of Hygiene Ethics Committee.

Unintended pregnancy was defined as the woman reporting the pregnancy as ‘not wanting to be pregnant at that time’ in the study questionnaire. The main outcome variables for this study were: (1) level of ANC and; (2) birth place. Level ANC was explored using a composite variable assessing the overall level of care on a four-point scale (0=none; 1=low; 2=medium; 3= high) and drew upon information regarding the gestation of the first ANC visit, the number of antenatal visits in total, and whether or not they had tetanus injections during the antenatal visits. Birth place was self-reported location of delivery defined as either at home or an institutional health setting (health centre or hospital).

Descriptive statistics were performed for all variables. Separate multinomial logistic regression models were used to identify if unintended pregnancy was a predictor for poor ANC (none/low ANC compared to medium/high ANC) or home delivery (home compared to institutional delivery).
Models were adjusted for sociodemographic (eg, ethnic group, urban/rural location, primary education level, wealth index) and self-reported pregnancy-related (eg, parity) factors.

Around 17% of women reported that their most recent pregnancy was unintended, slightly lower than 2002 Demographic Health Survey estimates of 23.6% of live births. Women who reported unintended pregnancy were older (40.8% of women > 30 years reported unintended pregnancy compared to only 29.1% of women 20-30 years) multipara (86.1%), and more than half (58.5%) did not have access to family planning information. Higher rates of unintended pregnancy among older women have been reported elsewhere in Vietnam possibly a function of older women having fewer pregnancies and being more likely that their pregnancies will be unintended (10). There were no significant differences in the proportion of women reporting intended and unintended pregnancy by ethnicity, marital status, education level or wealth index.

The proportion of women receiving four ANC services as recommended by the World Health Organisation (WHO) was considerably lower in the current study (26.4%) compared to national Vietnamese estimates (59.6%) (11). In terms of health service use, antenatal care use was different among women with intended pregnancies in terms of gestation at first ANC visit, number of ANC visits and tetanus injections at ANC visits. More women with an intended pregnancy delivered at hospital (46.4%) compared to women with unintended pregnancy (37.7%).

Even after adjustment for sociodemographic and pregnancy-related factors, multivariate analysis revealed that women with intended pregnancies had odds twice (OR=2.0; 95%CI 1.5, 2.7; p<0.001) that of women with an unwanted pregnancy for medium/high level ANC. Intended pregnancy did not predict institutional delivery (OR=1.2; 95%CI 0.8, 1.7; p=0.433). Other factors associated with lack of antenatal care (and delivery care) included inability to speak Vietnamese (OR=0.1; 95%CI 0.0-0.4; p=0.006), belonging to ethnic group other than Kinh (OR=0.6; 95%CI 0.4-0.9; p=0.024), lower household education level (OR=1.7; 95%CI 1.2-2.4; p=0.005), rural residence (OR=0.5; 95%CI 0.4-0.7; p<0.001) and lower wealth (OR=0.6; 95%CI 0.5-0.8; p<0.001).

Interventions are needed to increase access to family planning information to reduce unintended pregnancies in conjunction with improving ANC use. Encouraging ANC attendance as early as possible during pregnancy and supporting attendance at four ANC appointments during pregnancy, as recommended by WHO, should be aimed at women in Vietnam with unintended pregnancies to ensure adequate ANC is received. Increasing access to ANC will likely play a crucial role in decreasing maternal and neonatal mortality and improving health (12, 13).
Driver Fatigue And Its Measurement Methods In Indonesia Coal Mining: A Literature Review

Hendra Tanjung
Hendra Tanjung
Faculty of Public Health Universitas Indonesia
Indonesia
dahen75@gmail.com

Driver fatigue is a serious problem that contributed to the accident on the street about 20% -30% (Lal, 2004), and even 35% (Worksafe, 2006). But there are difficulties in measuring the specific contribution of fatigue to a serious accident (Worksafe, 2006).

Driver fatigue can be grouped into a sleep-related (SR) and task related (TR). SR is caused by lack of sleep, the addition of waking hours, and the circadian clock. While TR can be influenced demands of work and duration of action (May and Baldwin, 2009).

Fatigue measurement method is very diverse and varied. Mostly used in the study in patients with certain diseases, nurses, pilots, drivers in general traffic and workers in the industry. However, information on the driver’s fatigue measurement method in coal mines is very limited.

Driving in the coal mine have differences with driving on public traffic. Type of vehicle, work patterns, environmental conditions are different to driving on public traffic. The study of the concepts and methods of measurement of fatigue on driver in coal mines is important.

This study aims to identify the development of research on the concept and characteristics of driver fatigue and fatigue measurement methods based on the characteristics of the coal mines in Indonesia.

This study is a literature review of several journals and research reports relevant to identify the development of research on fatigue to the driver in a coal mine (operator), especially in Indonesia and the method of measurement in accordance with the characteristics of the coal mines in Indonesia.

According to WorkCover, 2006, driver fatigue indicators are as follows: (RoSPA, 2001) feelings of sleepiness, extend the sleep time during holidays, a greater tendency to fall asleep at work, take a nap more often during leisure hours, do not feel refreshed after sleeping, repeatedly driving like drifting in and out of traffic, improved error and loss of concentration at work, and loss of control over gear changes and dispirited.

Traditionally measurement of fatigue in the driver can be classified into 3 groups: (Hartley et al., 2001) subjective measurement or observation using a questionnaire/survey, personal log books, diaries, changes in mood, behavior, and durability endurance; measurement of performance with ergographs method, reaction time, lane position deviation, heading error, and vigilance in general; become more reliable physiological measurements in line with technological developments.
Indications physiological fatigue such as heart rate and core body temperature, electro-encephalogram (ECG), electro-oculogram (EOG) and electro-myogram (EMG).

One of the serious problems is no methods that directly measuring the fatigue itself. There is no absolute measure for measuring fatigue as compared with the energy consumption expressed in kilo calories. Experimental research that many do more to measure certain manifestations or indicators of fatigue. (Grandjean, 1979, Kroemer and Grandjean, 1997).

According to Wood, 2001 measuring levels of fatigue can not be measured directly, but there are three methods which have generally been used to measure fatigue.

1) Some methods or equipment to measure interference performance before work, during work, or monitor performance in real time at the workplace, such as: psychomotor Vigilance Task (PVT); reaction Time / Clock Macworth testing device; the Occupational Safety Performance Assessment Test (OSPAT); the system FIT2000; the PERCLOS system; stimulus-response tasks, and head nodding

2) Prediction model that calculates the number of opportunities for sleep and extrapolated into a probability of experiencing fatigue and recovery. Examples: audit Fatigue InterDyne (Faid); fatigue Avoidance Scheduling Tool (FAST); and self-report measures of fatigue
E.Coli Food Canteen Contamination In University Of Jakarta

I Made Djaja
Almira Ramadini Puteri; I Made Djaja
Faculty of Public Health Universitas Indonesia
Indonesia
almiraputeri@yahoo.com

Food contamination in Jakarta quite high such as E. coli contamination in street food vendor around 32%, restaurant about 12% and food catering around 7%. In each faculty of Indonesian University, there is a canteen for students having snack or food. Because of high food contamination in Jakarta would like to have research about food canteen contamination in the university.

The objective of this research is to find out factor associated with E.coli contamination in food canteen.

Study design is cross sectional study, having 70 counters and taking food samples from each food counters. And interviewing 70 food handlers (one food handler for each food counter). E. coli food contamination is done in Local Health Laboratory in Bogor.

Prevalence of E.coli food canteen contamination in this university is 60%. There are two factors involved in E.coli food canteen contamination. There are kitchen utensils hygiene and sanitation (p=0.005 and OR=6.0) and canteen environment (p=0.01 and OR=4.2). Whereas, food handlers hygiene and sanitation, food processing and canteen facilities don't have any association with E.coli food canteen contamination. Multivariate analysis found that E.coli food canteen contamination associated with (p less than 0.05) hygiene and sanitation of food processing (OR=5.4), hygine and sanitation of kitchen utensils (OR=5.3) and canteen environment (OR=4.1). Therefore, food hygiene and sanitation training is important for food handlers in order to reduce E.coli food canteen risk of contamination.
Early Complementary Feeding Practice To Infant In Tegal Selatan And Margadana Sub-Districts Of Tegal City In 2014

Adila Prabasiwi
Adila Prabasiwi; Sandra Fikawati
Politeknik Harapan Bersama Tegal
Indonesia
adilaprabasiwi@gmail.com

National data shows that the rates of exclusive breastfeeding remain low. According to Riskesdas 2013, exclusive breastfeeding only covers 38%. The government sets 80% as a new target for exclusive breastfeeding. Tegal Selatan and Margadana Sub-Districts are the chosen as the site for research because both areas hold the predicate for lowest rate of breastfeeding in Tegal, only reaching 39% and 43%, respectively.

The aim of this study is to describe when a mother give complementary feeding, or in other word a mother failed in exclusive breastfeeding, what kind of food and/or drink are given aside from break milk, the reason behind additional food and/or drink given to the infant as complementary feeding, and dietary energy consumption of mothers during lactation. The study is conducted in Tegal Selatan and Margadana Sub-Districts of Tegal City on May 2014

This is a descriptive study with crossectional design. Data collection was conducted in Tegal Selatan and Margadana Sub-Districts of Tegal City on May 2014. The total responden were 150 mothers who are no longer breastfeeding exclusively or mothers who give their infants with food and/or drink aside from breast milk. The data was analized using univariate analysis.

The result of this research indicated that almost 50% of respondents give complementary feeding, or in other word a mother failed in exclusive breastfeeding on the first day postpartum. 60.7% during the first week of postpartum of, and 78% in the first four weeks of postpartum. Food given, in addition to breast milk, varies from infant formula, water, banana, and baby porridge. In this research, it is determined that 25.3% of respondents are prescribed infant formula by health officer. The majority of respondents supply their infants with additional food because mother feels that her breast milk is insufficient to fulfill the needs of her baby. Those who feel that her breast milk is insufficient consume less energy (2,070 cal/day) than those who feel they produce adequate breastmilk (2,119 cal/day). Health officer during partus who correctly assist in early initiation breastfeeding are found to only reach 31.3%. Health personnel are recommended to provide information regarding exclusive breastfeeding to new mothers as early as AnteNatal Care (ANC), and creating and maintaining ways to encourage new mothers to breastfeed.
Effect Of Carbohydrate Electrolyte Drinks To Blood Urea Levels, Blood Creatine Kinase Levels, And Performance In National Rowing Male Athletes 2015

Fitria
Fitria; Siti Arifah Pujonarti
Universitas Indonesia
Indonesia
fitria.gizi@gmail.com

Long lasting exercise will deplete muscle glycogen and damage muscle tissue which can be seen from the increased levels of blood urea and creatine kinase. Increased levels of blood urea and creatine kinase can cause a decrease in performance at the next exercise or competition.

This study discusses the effect of carbohydrate electrolyte drinks on blood urea levels, blood creatine kinase levels, and performance.

This is true experimental study, single blind, cross over design in 10 rowing male athletes in the National Training Centre Pengalengan 2015. Beverages provided are electrolyte drinks with the amount of carbohydrates as much as 1 g/kg body weight in the treatment group and 0.35 g/kg body weight in the control group. Beverages given immediately after the workout and the next two hours (4 hours recovery). Venous blood sample was collected to measure the reduction of blood urea and creatine kinase levels before and after drinking beverages using Cobas C111 and Advia 1650/1800 respectively. Performance results (speed, distance, and total work) on the monitor screen while doing exercise rowing ergometer were recorded. All data between the two treatments compared with t test. Statistical significance was set at p-value < 0.05.

The result showed that the reduction of blood urea and creatine kinase levels is greater in the treatment group. It suggests that beverages contain 1 g/kg body weight carbohydrate is effective to restore muscle glycogen stores and decrease muscle tissue damage.
Effect Of Chronic Exposure To Synthetic And Natural Female Hormone On Freshwater Cladocerans Daphnia Magna, And Potential Mechanisms Of Endocrine Disruption

Algui K. F. Chen
Algui K. F. Chen; Shih-Hsien Chang; Ken K. S. Wang
School of Public Health, Chung Shan Medical University
Taiwan
ckfalgui@gmail.com

In recent years, female hormone were commonly used in cosmetics, oral contraceptives, pesticides and pharmaceutical fields, through the discarded into sewers or wastewater, induce the potential impact on the aquatic environment.

In this study, the acute and chronic ecotoxic effects of female hormones have been investigated on Daphnia magna.

In this study, neonate acute toxicity, embryo toxicity, and maternal hereditary influenced test were used for estimate the toxic effect of female hormone on D. magna. Five other endpoints were examined including mortality rate, embryo development inhibition rate, teratogenic rate, intra brood chamber death and offspring survival rate were observed after 14 days.

The effective concentrations immobilizing 50% (48 h EC50) of E1, EE2 and DES on daphnia neonates were 4.889, > 20 and 0.516 mgL-1, respectively. There was non-significant effect on embryos after 48 h of female hormones exposed. The chronic toxicity tests of female hormones effect on D. magna, revealed that with increase concentration of female hormone, the rate of intra brood chamber death were increased and offspring survival rate are decreased, respectively. Following EE2 and DES exposure, undeveloped second antennae, curved or unextended tail spines, and carapace open were observed in live neonates, respectively. Synthetic and natural female hormone could act as an endocrine disruptor on D. magna as it interferes with embryo development inhibition, teratogenesis, and intra brood chamber death.

The present study clearly demonstrated that female hormones may cause acute toxicity and teratogenic effect in both neonate and embryo of D. magna. After 14 days of exposure to synthetic and natural female hormones, D. magna have showed significant effects on survival of offspring.
Effect Of Giving Moringa Leaf Extract To DNA Damage In Pregnant Women Working In Informal Sector

*Masyitha Muis*

*Masyitha Muis, Veni Hadju, Burhanuddin Bahar, and Syamsiar S.Russeng*

Public Health Faculty Hasanuddin University

Indonesia

masyithamuis@yahoo.co.id

Moringa leaves are the leaves of the Moringa tree contain a variety of macro and micro nutrients and active ingredients which act as antioxidants. This study wanted to see the effect of Moringa leaf extract in pregnant women working in informal sector to DNA damage / 8-OHdG concentration ..

The goals of this study was to determine the effect of Moringa leaf extract to DNA Damage in Pregnant Women Working in Informal Sector.

This study design is randomized, double-blind, controlled trials. Pregnant women working in informal sector (generally the workers and the seller). Statistical analysis using paired and independent t-tests.

Characteristics of study subjects according to treatment group was not significantly different except for the variable age, and gravid, (p = 0.037dan p = 0.045). After the intervention, seen a decrease in the concentration of 8-OHdG / significant DNA damage in KP (3797 ± 1297 to 1901 ± 187; p = <0.001) were also in KK (3590 ± 1220 to 2204 ± 782; p = <0.001). Seen significant difference from the big changes in DNA damage between the two groups (--1871± 1615 vs. 1253 ± 1701; p = 0.002).
Effect Of Long Commutes To Work From Health Perspective: Literature Review

Milla Herdayati

Universitas Indonesia
Indonesia
Millaherdayati@gmail.com

The term of commute has become the shorthand for the daily journey between home and work. The term emphasizes the routine and repeated nature of this journey. As a feature of modern society, commuting has played its part in developing the world in which we live. The substantial growth in the use of the private car have given people the “freedom” to live further from where they work, taking greater advantage of sub urban and rural living. Many cities and towns are choked by the daily exodus from homes to offices and back. Time commuting is an important component for most working people. People spend a lot of time commuting and often find it a health burden.

The aims of this study are to explore time and the effects of commuting time on health outcome in many cities/towns.

We use literature review on commuting in many cities/town including Indonesia based on journals/papers published in last five years.

The findings of previous studies are variability in commuting time, commuting associated with stress and fatigue, exhaustion, and sickness absence. Long hour of commuting especially if we are driving is associated with high blood pressure, musculoskeletal disorders, and increased anger. The negative health outcomes not only directly related to the commuting situation itself. This may be mediated through the inter-domain transfer effect (spill-over) of a negative commuting situation or be the result of having less time for health-promoting behavior such physical activity, relaxation, and social participation. The study shows if long commutes to work correlated with negative health outcomes. It demonstrates the need of considering the negative side-effects of commuting when discussing population and health policies caused by urban development impact. Jakarta and other major cities in Indonesia seem to have the same feature with other metropolitan cities in the world in the field of urban development and mass transportation.
Effect Of Zinc Supplementation As A Treatment Of Pneumonia In Children: Systematic Review Of Randomized Controlled Trials

Febrina Elisabeth
Defry Lesmana; Febrina Elisabeth; Rahma Listyandini; Humaira Anggie Nauli; Widya Asih Lestari;
Universitas Indonesia
Indonesia
defry.lesmana@gmail.com

Pneumonia is the leading cause of pediatric morbidity and mortality around the world. The present study was undertaken to review the effectiveness of zinc supplementation in the treatment of pneumonia in children.

To review the effects of zinc supplementation on children. We conducted a systematic review of the randomized controlled trials to estimate the effectiveness of zinc supplementation in the treatment of pneumonia in children including grade of recommendations and level of. The methodological quality of RCTs were evaluated by using Jadad Score. Analysis was conducted by using five levels of evidence developed by Van Tulder and grading recommendations were based on Phillips et al.

This systematic review indicates that 10-20 mg zinc per day is used at the studies. 70 mg of zinc weekly could reduces pneumonia and mortality in young children. On the other hand, some studies showed a non effective zinc supplementation for pneumonia. Those studies were focused on short duration in acute episodes of pneumonia.
Effectiveness Of Asthma Education And Self-Management Programme In Treatment Adherence And Quality Of Life Among Adolescent

Ahmad Filza Ismail
Amirul Hisham Zainol; Norsa’adah Bachok; Fahisham Taib; Ahmad Filza Ismail
Universiti Sains Malaysia
Malaysia
afilza@usm.my

Asthma is a worldwide burden especially when it involved the adolescents and leads to poor quality of life. The disease is not curable but controllable especially with the right medications and provided the patient is having a good compliance to medications.

The objective of this study is to assess the effectiveness of the developed asthma education and self-management programme in treatment adherence and quality of life among adolescents.

This was a non-blinded controlled trial study done among 262 secondary school children in a northeastern state of Malaysia. They were divided into study and control group. Self-administered validated questionnaires were used to assess treatment adherence and the quality of life where distributed to the participants at the beginning and 12 weeks after the intervention was done to the study group. The outcome measurements were analysed using repeated measure analysis of covariance with asthma control score at baseline as a covariate.

Majority of the participants were female and their age ranged between 13 to 18 years old with mean age 15.1 (1.61) and 14.9 (1.47) years for study and control groups respectively. There were no significant differences at baseline between study and control groups in mean score of treatment adherence (t statistic (degree of freedom (df)) = 0.101 (244), p value = 0.918), and mean score of quality of life (t statistic (df) = 0.86 (260), p value = 0.393). The differences of mean scores for the both parameters studied were found statistically significant 12 weeks post intervention between groups based on time after the adjustment for covariate. The mean of treatment adherence score of the intervention group [4.64 (95% confidence interval (CI): 4.46, 4.81)] was significantly higher than the control group [4.20 (95% CI: 4.01, 4.40)] with regard of time [Pillais Trace F statistic (df) = 8.72 (1.243), p value = 0.003]; and the mean score of quality of life of the intervention group [90.95 (95% CI: 87.13, 94.76)] was significantly higher than the control group [84.08 (95% CI: 80.02, 88.14)] with regard of time [Wilks Lambda F statistic (df) = 14.19 (1.259), p value <0.001].

The intervention in term of asthma education and self-management programme has been proven to be effective in improving treatment adherence and directly improve the quality of life.
Effects Of Particulate Matter 10µ In Ambient Against To Acute Non Infection Respiratory Disorders In Stevedore Of Port Of Sunda Kelapa

I Made Djaja
I Made Djaja; Robi’ur Rosyid
Department of Environmental Health, Faculty of Public Health, Universitas Indonesia, C Building 2nd Floor, Kampus UI Depok 16424, Indonesia
Indonesia
imddjaja@ui.ac.id

The most destructive particles for health are the size of equal or less than 10 micron. It can enter into lungs

This research intends to determine the relation of ambient air concentration of PM 10µ to Acute Non-infection Respiratory Disorder (ANRD) on stevedore of port of Sunda Kelapa

Using cross-sectional study, this research intends to determine the relation of ambient air concentration of PM 10µ to Acute Non-infection Respiratory Disorder (ANRD) on stevedore of port of Sunda Kelapa. The Data of respiratory disorder are gained by interviewing 320 respondents, observing the field, and measuring the concentration of PM10, T-Test, chi-square and multiple Logistic Regression are used to analyze the relationship of PM 10µ concentration and ANRD

Air Quality Index (AQI) with values <139 µg / m3 is categorized into AQI Healthy, while ≥ 139 µg/m3 AQI unhealthy. Non-infection acute respiratory disorder then calculated if stevedore has one of the four symptoms (cough, phlegm, wheezing, and shortness of breath), and long occurrence of symptoms not more than 14 days, and no fever.

That there are 76 respondents (43.7%) who work daily in a location with AQI PM10 unhealthy ≥ 139 µg/m3 with ANRD, whereas in locations with AQI PM10 Healthy are 45 respondents (30.8%). Analysis results obtained by p value = 0.025, it can be concluded that there is a difference between the proportion of ANRD stevedore who work in locations with AQI PM10 Unhealthy with stevedore who work in locations with AQI PM10 healthy with OR = 1.741

Furthermore, decreasing the PM 10 concentration is needed to be done in order to set the air quality index (AQI) is still in the safe limit. In this research, AQI unhealthy 1.741 times with NIARD Condition after controlled by other variable. Training of the worker in order to reduce risk of ANRD
Effects Of Low- Carb Diet Vs. Low- Fat Diet On Triglycerides /High Density Lipo-Protein Ratio: A Systematic Review Of Randomised Clinical Trials

Helman Alfonso
Alfonso, Helman; Demberel, Battsooj
School of Public Health, Curtin University, Perth, Australia
Australia
helman.alfonso@curtin.edu.au

Cardiovascular disease (CVD) is an important public health concern worldwide. It was responsible for 31% of total deaths globally in 2012 and the number of people with CVD is estimated to increase over the coming years in relation to unhealthy diet, sedentary lifestyle and excessive use of alcohol and tobacco. A low-fat diet (LFD) is the current choice to mitigate the impact of CVDs. However, its benefit to reduce dyslipidemia has become questionable in recent years as the most of randomised controlled trials (RCT) documented the effectiveness of low-carbohydrate diet (LCD) over LFD. Recently, triglycerides /high density lipo-protein (TRIG/HDL) ratio is regarded as a strong marker of metabolic syndrome. Therefore, we have chosen TRIG/HDL ratio as a primary outcome of our study.

Based on RCTs compare the effects of LCD and LFD on TRIG/HDL ratio

Eligible papers were selected from PubMed, Web of Science, Medline and Scopus databases, from 1980 to 2014. The key words for the search included low carbohydrate diet, low-fat diet, serum lipid, lipid profile and randomised clinical trials. Ratio improvement was defined as the proportional decreased of the difference between the baseline and final values. PEdro scale was used to evaluate the quality of included RCTs. In addition to general analysis, subgroup analysis was conducted according to comorbidity status, study duration and energy restriction.

Nineteen studies were finally included, comprising 2567 people. 17 RCTs documented LCD with more beneficial effect on improving TRIG/HDL ratio, ranging from 1.18 to 12.82 times. This beneficial effect was highly correlated to high-fat content in the LCD (r= -0.77). Regardless of study duration, energy restriction and comorbidity status of the participants, LCD improved TRIG/HDL ratio far better than LFD. People without comorbidity had benefitted more from LCD than the counterparts with comorbidity and on the same diet with median (−26.86% vs. −20.51%), while this effect was not clearly seen on LFD with only small difference of 2% (−7.48% vs. −5.45%). Individuals who restricted their calorie intake had an improved ratio than those who did not (−25.07% vs. −20.51% in LCD and −7.92% vs. −5.45% in LFD). LCD seems to be more effective if used less than 12 months (−25.9% vs. −7.92% in LCD and −7.92% vs. −5.45% in LFD). LCD showed a more beneficial effect for those who adhered to the intervention diet for 12 or more months (−0.09% vs. −9.56%).

In conclusion, LCD compared to LFD has a more positive impact on dyslipidemia, as measured by TRIG/HDL ratio. In light of recent results of RCT comparing LCD with LFD, the current dietary guidelines for the preference for LFD should be re-examined soon for the sake of public health.
Engaging Adolescents To Intervene Gender Based Violence And Unplanned Pregnancy: Tips Learnt From A Knowledge Transfer Programme

Irahafiza Jamil
Irahafiza Jamil; Sajaratulnisah Othman; Julia Suhaimi; Wong Yut Lin; Vickneswari Ayadurai; Nor Amalina Mustaffa; et. al
University of Malaya
Malaysia
irahafiza1991@gmail.com

Adolescence is a stage of development from childhood to adult and involves physical and psychological development. Lack of knowledge and support may lead the adolescents to involve in sexual reproductive health problems such as violence, pregnancy and sexual transmitted disease (STD). Realizing the importance of youth development, University Malaya in collaboration with Universiti Teknologi Mara (UiTM), All Womens Action Society (AWAM) and local public health centre (Klinik Kesihatan) carry out Knowledge Transfer Programme (KTP) which aims to transfer knowledge and skill to youth to prevent gender-based violence (GBV) and pregnancy among teenagers. Youth from an urban poor residential area in Klang Valley, Malaysia are invited to participate in the empowerment programme.

The environment may lead the vulnerable youth to have unhealthy relationships and teenage pregnancy. However, there are challenges in getting youth involvement and interest, and to restrain them in the programme.

This article provides tips of getting interest and sustain involvement from the youth throughout the two-year programme. The information is based on the experience gathered from observation conducting the programme.

The stakeholders from three sectors (academics, non-governmental organisation and health care providers) discussed on plans and strategies in recruiting youth for the programme. The programme includes training and workshop for youth, peer leaders and awareness campaign in the community. The initial youth recruitment was done through the local children activity centre set up by the Social Welfare Department. The youth range from 14 to 17 years old and all are attending secondary school. They were briefed on programme and participation was on voluntary basis. The youth listed out their interests and needs with regards to the programme. The youth subsequently formed a club to prepare themselves as leader of youth in the community. In the future they would be responsible in educating and recruiting their friends towards positive and healthy living. To stay connected with the youth, we have regular meetings which held in the common meeting place in children centre of Taman Medan as well as the use of social media such as Whatsapp. There are large number of youth who are active and attended regular meetings and activities whereas some of them are passive and only attend the activity which involve their interest such as outdoor activities. To get participation from the passive youth, activities involving their interest are held and the youth have a direct involvement in organizing the activities.
Tips of getting interest and sustain involvement from the youth

It is a challenge to get involvement from the youth for the programme. One of the ways to get recruitment of youth is through youth leader as the leader has a strong influence that could make recruitment of his/her friends in the programme easier. To attract interest from youth to join the activities and workshops, title of the workshop was made catchy and the topic discuss should be related to youth development like Apa Itu Cinta (Whats love)? The training was purposely held in a new environment/place outside their residential area as this seemed to create more interest and build excitement of the youth. The youth will not feel constrained by their common environment and thus helps them in setting up their minds for the programme.

In order to ensure the youth to stay focused throughout the programme, rules were set at the beginning of the program. These rules were set by the youth with guidance of the facilitators and they were revised and discussed together. This action made them feel important and responsible in keeping good behavior throughout the programme.

As giving a long talk would reduce the attention and interest of the youth, mixing interactive and fun activity between two sessions and outdoor activity was implemented. These activities should contain the message of the program to ensure that the youth learn while having fun. It is also normal to have active and passive youths in a group. To keep involvement from passive youth, effort to get direct participation from them such as giving tasks related to their interest was done. To sustain continuous involvement from youth, regular meetings should be held to keep the pace and spirit of the youth. Regular meetings ensures that the youth keep in mind their purpose of creating a youth club and the activities that they could come up with to create a positive environment. Fun activities can be added in regular meeting to keep the youth interested and avoid boring environment. To have a common and accessible place like the children activity centre (PAKK) is important as the youth and project members can meet and having discussions. In order to improve and getting interest from the youth, it is important to assess the needs, interests and dislikes of the youth as they will feel heard and appreciated. In addition, the youth are tech heavy and by having a social medium like Whatsapp and Facebook to stay connected with the youth is a bonus. They also can have light discussion and report their progress in the social medium without having formal meetings.
Enhancing Senior Health Care Volunteers - Potential For Senior Health Care: A Case Study Of Mueang District, Nakhon Ratchasima

Tanida Phatisena
Tanida Phatisena
Nakhon Ratchasima Rajabhat University
Thailand
drtanida@hotmail.com

Thailand is currently facing an aging society leading to a strong need to provide understanding and closed support for the seniors from their family including their children and family members. However, there are many seniors having insufficient care from their families, and need support from volunteers, people who are willing to contribute themselves for public benefits.

1) To develop procedures for enhancing senior health care volunteers potential for senior health care condition in Nakhon Ratchasima. 2) To study the results of procedures for enhancing senior health care volunteers potential for senior health care condition.

The research design was in participatory action research separated into 2 phases, the first phase was a study of community context, health condition and senior health care, and the second phase dealt with a development of senior health care volunteers at homes potentials by integrating empowerment theory from Lord,J (1991). There were 5 steps in this theory: 1) problem analysis, 2) problem awareness creation, 3) skill development of senior health care volunteers at home, 4) dissemination of the results and creating network, and 5) evaluation. The sample group consisted of 24 senior health care volunteers at Talad Sub-district, Mueang District Nakhon Ratchasima. Research instruments were group discussion guideline and in-depth interview and interview. Quantitative content analysis was based n descriptive statistics namely frequency, percentage, mean and Paired t-test while qualitative data was based on the content analysis.

The results showed that after participating in procedures for enhancing senior health care volunteers potential, the sample group had significantly higher knowledge and understanding about their duty at .05 level than before the participation. The result corresponds with the study of Rattana Yamsri (2010) who studied the development of public health at Rangsit Municipality, Tanyaburi District, Pathumtani in taking care of chronic disease seniors. It was found that the volunteers had higher knowledge and ability in taking care of these seniors. Results from procedures for enhancing senior health care volunteers potential led to the model for enhancing senior health care volunteers potential in 5 steps: 1) problem analysis, 2) problem awareness creation, 3) skill development of senior health care volunteers at home, 4) dissemination of the results and creating network, and 5) evaluation. Key success factors in a development of senior health care volunteers for senior health care were from participation of the stakeholders namely Tambon Health Promotion hospitals, Sub-district Administrative Office and Elderly Association through 5 steps as stated in this paper. Recommendation for future research is to develop the leaders of senior health care volunteers at home for sustainable senior health care.
Environmental Health Promotion Model To Prevent Developmental Disruption Of Children As A Result Of Mercury Exposure

Yusniar Hanani Darundiati
Yusniar Hanani Darundiati; Anies; Henna Rya Sunnoko, Onny Setiani
Faculty of Public Health, Diponegoro University
Indonesia
darundiati@gmail.com

Artisanal gold mining using amalgamation method has been conducted at Jendi Village since 1993. Without any treatment to tailing and burning amalgam without retort (a device to distill mercury vapor), these practices caused mercury dispersion into its surrounding environment and exposed local inhabitants. Mercury is toxic to nervous system and development, thus potentially cause developmental disruption to children living in artisanal mining area. Besides that, mercury was categorized as possibly human carcinogen. In the environment, it can be methylated by bacteria, and also involved in bioconcentration, bioaccumulation and biomagnification process which can increase its toxicity significantly.

The purpose of this study was to develop environmental health promotion model to prevent developmental disruption of children as a result of mercury exposure.

This research conducted in 3 steps: Step 1. Exploration of environmental factors, step 2. Epidemiologic research, and step 3. Planning and developing model. Population consisted of children living at Jendi Village, Selogiri Subdistrict, Wonogiri District. Samples were 54 children, who were chosen based on inclusion criteria.

Result showed that category of exposed area and level of education of mothers were significantly influenced children development. Children living in exposed area had to face risk to have developmental disruption 5 times higher than children living in unexposed area. There was no correlation between childrens hair-Hg level and level of development. Environmental health promotion model increase level of knowledge and competency of mothers/caregivers in preventing negative effects of mercury exposure to children development. Environmental health promotion model consist of 12 constructs: hazard identification, risk assessment, risk control, monitoring and review, perceived susceptibility, perceived severity, perceived threat, perceived benefit, perceived barrier, self-efficacy, cues to action, social environment. It is recommended to apply this model into other artisanal gold mining sites in Indonesia.

Lijun Wang
Lijun Wang
School of Public Health, Wuhan University, China
China
wanglj1003@163.com

The diseases spectrum of human beings has experienced a tremendous change that the incidence of cancer is skyrocketing all around the world as a severe public health concern now. Compared with developed countries, there is a rapid rise of lung cancer incidence and mortality in developing countries. Lung cancer has been considered the cancer that brought the heaviest burden to the country in China. It is estimated that there were 600,000 lung cancer deaths in China in 2014, more than one fourth of the world (2,200,000).

Given the fact that there is no national-level data except for three National Retrospect Spot-checks of Death-causation in 1973-1975, 1990-1992 and 2004-2005, and the incidence data of cancer is rather sparse and not representative due to low coverage and imbalanced distribution, the estimation for lung cancer mortality information is essential to provide clues for epidemiological status and etiology of lung cancer in China.

To analyze the epidemiical features of lung cancer deaths in Chinese residents from 1987 to 2012, determine the regional and population distribution of lung cancer, explore the risk factors related to lung cancer death, allocate medical resources rationally and prevent effectively, thus making positive role on protecting high-risk population and curbing the prevalence of lung cancer. To evaluate the age, period, and birth cohort trends of lung cancer mortality of Chinese residents in recent thirty years, which is of great significance to estimate the burden of lung cancer and forecast the tendency in the future.

The analysis was based on two data sources conducted by the Center for Health Information and Statistics (CHIS): 1) WHO cancer mortality database for the years 1987-2000; and 2) China Public Health Statistical Yearbook [2002-2013]. Lung cancer mortality data was aggregated from year 1987 to 2012 and stratified by gender, age group (20-24, 24-30, …, 85+), and area (urban/rural).

(1) Age-standardized rates (ASRs) of four groups including urban male, urban female, rural male and rural female were used to describe the epidemic status and for comparison. ASR was calculated according to the 5th National Population Census data [2000] in China and the WHO World Standard Population [2000].

(2) Log-linear regression models with negative binomial errors, adjusted for age and reporting year, were fitted to analyze the lung cancer mortality diversity of gender and area and explore risk factors of it.

(3) Based on Log-linear regression models with Poisson errors, joinpoint models were fitted with ASR to calculate the annual percent changes (APCs) for the four groups, in order to evaluate secular trends of lung cancer in the last three decades.
(4) Age-period-cohort models were used to adjust for the interrelated effects between age, reporting year (period), and year of birth (cohort). There were 13 five-year age groups (20-24, 25-29, ..., and 80-84) and 6 five-year time periods (1985-1989, 1990-1994, ..., and 2010-2015), spanning 18 partially overlapping ten-year birth cohorts referred to by midyear of birth (1905, 1910, ..., and 1990) contributed in the calibrated models to describe the factors.

(1) The ASRs by Chinese population and world population were calculated for the four groups in 1987-2012, which presented higher among male and urban residents compared with female and rural residents.

(2) The log-linear regression results showed that, after adjusting for age and year, the risk of dying from lung cancer was higher with urban residents compared with rural residents (OR 1.47, 95% CI 1.39, 1.56), and higher among male compared with female (OR 2.31, 95% CI 2.18, 2.44).

(3) From 1987 to 2012, the average APCs for rural male and female showed an increase of 2.4% (P<0.05) and 2.9% (P<0.05) per year, respectively. While for urban male and female, it increased 0.4% (P=0.6) and 0.1 (P=0.9) per year respectively with no significance.

(4) The age-period-cohort analysis turned out the similar pattern for the four groups that age effects were statistically significant for lung cancer mortality in the full model (P<0.001) with increasing rate ratios (RRs) between age 20-84, and the period effects presented increasing RRs between 1987-2012. The overall cohort effects presenting decreasing RRs for the cohorts born between 1905-1990, except for the 1905-1925 cohorts of rural male and female.

In recent thirty years, the ASR for lung cancer mortality was increasing as a whole in China. Male and urban living turned out to be more likely to die from lung cancer, which could be explained by increasingly pollution and the large proportion of smokers among males. However, a remarkable uprising trend of lung cancer mortality in rural areas was observed compared with a slow-down increase in urban areas in this study, which sounded the alarm bell for the rural health in both sexes and called for further studies on it.

As we know, the mortality risks for lung cancer increase with the rise of age. However, the age-specific mortality rates rose until age 75-80 and then decreased after age 80 with reference to the trend analysis of age groups. In this study, the APC models presented that the age-specific mortality rates and risks for lung cancer mortality rose continuously within all the age groups 20-85, which corresponded with medical theories and several previously study for epidemic risks of lung cancer. The increase in the semi-logarithmic graphs of period rate ratios showed the risks rose continuously for Chinese residents in 1987-2012, which confirmed the increase in estimated APCs. The cohort-specific risks had an overall decline trend for cohorts 1905-1990. The results of APC models suggested that age and time period were the decisive effects led to the rise of lung cancer mortality in China in recent three decades but not body health transitions, which means aging population is the main cause for lung cancer deaths.

This study highlighted the heavy burden of lung cancer mortality and uprising trend of lung cancer mortality in China especially in rural areas. It emphasized an urgent need for a more strict strategy of tobacco control, and comprehensive collaboration of the society for preventing avoidable deaths in China and halt the uprising trend of lung cancer mortality.
Ergonomic Risk Assessment For Repetitive Strain Injury Among Handphone Users At Universitas Indonesia, 2015

Zulkifli Djunaidi
Zulkifli Djunaidi; Octavia Maharani
Department of Occupational Health and Safety, Faculty of Public Health, Universitas Indonesia
Indonesia
zulkifli_djunaidi@yahoo.com

Based on the research of Business Monitor International (BMI) in Keegan (2007), the fastest growth of hand phone cellular market (users) is in India, Vietnam, Pakistan, China, and Indonesia. In Indonesia, the growth of hand phone cellular market has been reached 25% - 30% per year.

The current research of ROA (Research on Asia) Group (2010) in Cahyadi (2012) stated that hand phone users improve from 68 million people in 2006 to 94.7 million in 2007 and become 133 million in 2010. Hand phone becomes a major need of communication for community. The intensive use of hand phone will make health effects for the users such as Repetitive Strain Injury. (Webster, 2006)

Universitas Indonesia as one of the biggest university in Indonesia has thousands of students who use the hand phone for communication and study. This is the reason why this study conduct in Universitas Indonesia, especially among student in Faculty of Public Health, Universitas Indonesia.

The study aims to analyze the risk level of ergonomics and subjective symptoms lead to repetitive strain injury from X and Y hand phone users at Universitas Indonesia.

Research design used in the study is cross sectional study. Data collection was conduct by using, observation, physical measurements of hand phone and interview. Number of samples was measured by using Lameshows formula and we determined 130 students who are hand phone users of smart phone and android for minimum 6 months to become the samples. Data collection is conduct during January march 2015. Analysis of data was performed by using RULA (Rapid Upper Limb Assessment) method to determine the level of Ergonomic Risk among hand phone users.

The level of ergonomic risk has been assessed by using RULA (Rapid Upper Limb Assessment) showed results from medium to high level of risk with range of values 4-6. The observation of subjective symptoms lead to repetitive strain injury showed 88 of respondents (67.7%) feel of stiffness/ pain/ cramps/ numbness/ awkward/ discomfort. The biggest symptoms occurred in the upper neck (28.5%), right wrist (27.7%), and lower neck (26.2%). It needs necessary control measures by improving ergonomic design and administrative work such as restrictions on hours of work, disseminate information of good ergonomic posture and applying setting hand phone, and stretching for 10 minutes every 2 hour nonstop using hand phone.
Evaluation Of Neurological And Skin Disorders In Agricultural Workers At Brebes District, Central Java, 2014

Ema Hermawati
Raisa Afni Afifah; Ema Hermawati; Edwin van der Maden; Melliza Wulansari;
Faculty of Public Health, Universitas Indonesia
Indonesia
ema.hermawati1@gmail.com

Various types of pesticides are offered by the manufacturer to the farmer, without explaining toxic effects to human health, which can be both short-term and long-term effects. Organophosphate, one of pesticide group, can bound with cholinesterase enzyme and it can not hydrolyze acetylcholine compounds causing the symptoms/signs of poisoning. Pesticides can enter the human body through inhalation, ingestion or absorption. Various health effects due to exposure to pesticides among other causes biochemical changes in the enzyme, skin disorders, neurological disorders, reproductive disorders, and decreased immune system.

Brebes Region is one of various region which has high productivity in agricultural products, and also high users of pesticides so this region has a potency for any health effects due to pesticide exposure hence chosen as a location for research.

This researchs objectives are knowing symtoms of neurological disorders among agricultural worker and their associatons with long work exposed to pesticides.

The study design of this research is cross-sectional, where an effect and health risk factors were measured simultaneously. This study were conducted in five villages agricultural areas at Kersana Sub-District, Brebes, Central Java, Indonesia.

The population of this study are the farm workers, consisting farmers (male) and farm. Minimal samples-needed were estimated by estimation-proportion formula are 106 samples, but we got 121 farm workers as our samples, consisting 24 farmers and 97 farm labourers during these research.

Data collecting was done by structured-interview, cholinesterase measurement, and nutritional status measurement.

Data analized using Chi-Square test for baseline cholinesterase activities and neurological dependent variables. Cholinesterase and neurological disorders are related to several independent variables, there are length of exposure, PPE usages, nutritional status, knowledge related to pesticide, age, sex, and smoking behaviours.

Farm workers asked 23 nerve disorder symptoms experienced during the past 12 months. Symptoms of neurological disorders questionnaire adopted from the Agricultural Health Study. Those symptoms are; feeling tense/anxious/nervous, nausea/vomiting, feeling tired, sleepy or low energy most of the day, sweating a lot more than usual, difficulty seeing at night, being absentminded, forgetful, or confused, headache, lost of appetite, fast heart rate, difficulty with balance, blurred/double vision, difficulty concentrating. Numbness or pins-and-needles in hands/feet,
momentary loss of consciousness, feeling excessively irritable or angry, shaking/trembling hands, difficulty falling asleep/staying asleep, difficulty speaking, weakness in arms or legs, changes in sense of smell or taste, feeling depressed/indifferent/withdrawn, twitches, jerks, or involuntary movement of arms or legs. Furthermore, the group is determined into < 10 impaired neurological disorders and 10 impaired neurological disorders (Kamel & Hoppin, 2004). The overview of neurological disorders in farm workers and the differences in proportion between cholinesterase activities, length of exposure factors and individual characteristics with neurological disorders symptoms shown in

Chi-square test showed, there are observed differences between farm workers who exposed to pesticides for more than 30 hours per week, in having neurological disorders symptoms. The farm workers in that condition also have a risk 3.1 times greater to experience 10 or more symptoms of a neurological disorder, than the farm workers who exposed to pesticides for 30 hours per week or less. However, statistically there was no observed differences (p > 0.05) between the activity of the working periods, last time of exposure, age, sex, nutritional status, level of knowledge related to pesticides, use of PPE, and smoking habits with the number of neurological symptoms experienced in the past 12 months.

There is an significant association between the number of neurological disorders and length of exposure in week (p=0.015). Neurological disorders are disorders that attack the nervous system, both central and peripheral nervous system which includes the brain, spinal cord, cranial nerves, peripheral nerves, nerve roots, autonomic nervous system, and muscle and neuromuscular bridge. One type causes neurological disorders, which result from exposure to neurotoxic chemicals. One of the obstacles in the form of acetylcholinesterase mechanism. Cholinesterase is an enzyme form of biological catalysts in the body tissue which acts to keep the muscles, glands, and nerves work in an organized and harmonious. Cholinesterase is synthesized by the liver which is then distributed to each synapse in the blood plasma that serves to stop the nerve impulses by breaking the neurohormone acetylcholine at the synaptic gap and nerve fibers to acetyl choline.
Exploratory Study Of Social Network And Genesequencing On Shaping Transmission Route Of Idus Infected With HCV: Gatekeepers As Bridges Of Infection

Ying Wang
Ying Wang; Xiao-dong Tan; Sheng Zhou; Wang Zhou; Jing-song Peng; Yu-shan Ren; Zi-ling Ni; Bei Liu; Fen Yang; Xu-dong Gao
School of Public Health
China
2012203050012@whu.edu.cn

Hepatitis C virus (HCV) is a contagious blood-borne disease that poses a threat to human health and is considered to be a global public health problem. Epidemiological studies have recently been increasing their focus on the social network; social network analysis (SNA) allows for the identification and targeting of groups of people in an effort to judge high-risk behaviors and investigate the mode of transmission in a reasonable and scientific manner as compared to traditional contact tracing investigations done using structured interviews and questionnaires.

Objective the aim of the study was to assess, while controlling for individual risk characteristics, how certain network structural characteristics are related to HCV infections among IDUs and to determine the transmission route HCV among infected IDUs.

Methods injecting drug users (N=80) in central China were recruited from a previous follow-up case-control study. Demographic and behavioral information obtained from a computerized database for each group was analyzed. HCV RNA was extracted from blood specimens. HCV RNA loads were detected and the amplified sequences were used to construct a phylogenetic tree and to determine genetic distances. Socio-metric social links were established between participants and network measures were calculated using UCINET.

Results Comparisons between the case group and the control group pertaining to drug injection in the past 30 days distinctly different percentages (70.97% and 53.06%, respectively; p<0.05). In total, three HCV genotypes were identified, covering five subtypes. The largest group, comprising 13 sequences on the 5-UTR/Core tree, clustered with the subtype 3b reference sequence D11443. The alter density of the social networks for the whole sample (N=80), case group (N=31), control group (N=49), were 0.2389, 0.6269, and 0.3580. The maximum diameter found in the whole sample was 1.742 and the maximum diameter found in the control group was 1.659. Additionally, the clustering found to be present in the case group indicated that the IDUs infected with HCV were in frequent contact with others within their group. There were 4 pairs of nodes with genotypic distances of 0.000 that were identified and clustered in subtype 6a, and 1b; each pair of subjects was linked and was found in the one clique. 4 of the most active 5 nodes were infected with HCV; they were case 1 (6a), case 2 (6a), case 13 (3b), and case 66 (1b). The above 4 nodes played a role as a bridge, contributing to the connection of the other nodes. Conclusions The findings highlight the importance of harm reduction activities including counseling and social network interventions related to HCV prevention among IDUs.
Factor Related To Mothers Behavior In Giving Basic Immunization With Health Belief Model Theory Approach In Health Center Area Sukakarya, Sukabumi City In 2010

Wulan Meilani
Wulan Meilani; Dian Ayubi
Universitas Indonesia
Indonesia
w.meilani@gmail.com

Immunization for infants not only preventing them from diseases and deaths, but also functioned as an economic investment, because it prevents disease with cost effective. Since the establishment of the Immunization Development Program in 1974, immunization has saved more than 20 million lives after two decades, or equivalent to 3 million lives each year (UNICEF, 2005). In Indonesia, based on result of Health of Mother and Child Study in year 2001, immunization has reach 86.6% in year 2000, differ with data from Department of Health which has reach 98.2%.

For the last 10 years, basic immunization rate has decline, which current rate is 72% for Indonesia (UNICEF, 2005), this data shows that at several areas immunization rate is very low and has not meeting with UCI (Universal Child Immunization) rate at 90%. Department of Health Republic Indonesia stated that 1.7 million deaths of infants are due to not having a complete immunization basic package (Parents, 2010), that number correlate to one fifths of total infants in Indonesia alone.

To recognize perspective/gaining picture about mother perception on immunization related to mother behavior on giving a complete immunization basic for infants with age less than 1 year correlate with Health Belief Model theory that are: perceived seriousness, perceived susceptibility, perceived benefit and perceived barrier. Also to study the relation between mother education level and her behavior in giving immunization

This research is a quantitative research with design cross sectional study, which done at Sukakarya Health Community Center, City of Sukabumi, with amount of sample is 125 mother having infants aged 12-35 months old. Data analysis done with univariate analysis and bivariate data analysis. Bivariate data analysis is use for variables expected related with mother giving a complete basic immunization.

Data in this study is a categorical data so that it uses chi square to see relation between independent variable and dependent variables. To see the significance on statistical calculation is using significance boundary (p-value = 0.05) so that: If p-value > 0.05, Ho = no relation between mother behavior in giving immunization with variables in Health Belief Models and If p-value 0.05, H1 = presence of relation between mother behavior in giving immunization with other variables in Health Belief Models Theory.

Result of research showed no meaningful relation on two variables on Health Belief Model theory, which are perceived seriousness and perceived susceptibility of mother's behavior in giving basic immunization or p value > 0.05. On perceived seriousness, respondents have a positive perception
to every questions asked, as data showed 51.2% respondents are agreed in questions worriedness regarding paralysis happens as result of a disease. Meanwhile only 33.6% respondents were not agreeing that measles is an easy to cure disease. On perceived susceptibility, 76% of respondents were agreeing that at this moment, dangerous diseases were all up coming. On the other hand only 8% of participants stated agreed that when immunization for infants is not complete, infants are still exposed to diseases.

Meanwhile, the other two variables of Heath Belief Model are showing a meaningful relation on mother perception about perceived benefit and perceived barrier on mother behavior in giving basic immunization with p-value 0.001 and also showing a meaningful relation between mother education levels to mother behavior in giving meaningful basic immunization.

At perceived benefit, 76% of respondents stated agreed that immunization is an effective way in disease prevention. About 63.2% of respondent agree that immunization can prevent dangerous diseases. While on barrier variables, 89.6% of respondents stated not agreeing that vaccine is contained dangerous ingredients and only 19.2% of respondents agree that immunization can make infants become ill.
Factors Associated To Fully Immunized At Six Districts In Indonesia In 2013

Tri Yunis Miko Wahyono

Tri Yunis Miko Wahyono; Oktarinda, Yovsyah; Dwi Gayatri; Putri Bungsu
Department Epidemiology Public Health Faculty Universitas Indonesia
Indonesia
triyunis@yahoo.com

Since 1999, Indonesia due the realities of decentralization and district level autonomy the coverage of fully immunization was low every year.

Therefore, this study aims to measure district immunization coverage in 6 districts (Banjarmasin, Hulu Sungai Tengah, Lombok Timur, Mataram, Padang and Pesisir Selatan) and all factors associated with the coverage in the districts.

Rapid survey using 40 clusters with 14 samples for each cluster used at each district in the survey for both routine and TT immunization coverage survey at six districts, hence all information required immunization coverage and the factors had been gathered from the total 3360 children 12-23 months of ages. This cross sectional data collection done June-August 2013 at all districts

The study found that the fully immunization coverage at six districts was 73.5% and factors related to fully immunization status are;, Knowledge on TB (OR:1.52 95%CI:0.97-2.38), Knowledge of Tetanus (OR:0.37 95%CI: 0.20-0.68), Knowledge on Poliomyelitis(OR:0.63 95%CI:0.49-0.82), knowledge on Measles (OR: 0.74 95%CI: 1.35-2.25) source of information from health cadres(OR:1.55 95%CI: 0.99-2.41), place of immunization services for measles (OR:1.16 95%CI: 1.05-1.28). This study recommended that to increase fully immunization coverage health promotion should be done especially on Vaccine Preventable Diseases (VPDs) an it should be done by health cadres.
Factors Associated With Medical And Nursing-Care Expenses With Focus On Disability Prevention Points Of View

Takaaki Ikeda
Takaaki Ikeda; Susumu Yanagawa; Kenichi Murakami; Yoko Yanagawa
Tanpopo Support Clinic of home health care, Musashino, Japan; Tsubasa Home-visit Rehabilitation and Home Nursing Center, Mitaka, Japan
Japan
t.ikeda0110@gmail.com

Globally, disability prevention programs that maximize effectiveness and minimize cost in older people are a major public health concern.

The purpose of this study was to verify factors associated with medical and nursing-care expenses (MNE) in community-dwelling older people and to suggest a valid disability prevention program.

Eighty-three Japanese individuals aged 65 years (29 males and 54 females: mean age, 81.2 ± 6.3 years) who had enrolled in a disability prevention program participated in this study. According to the national average household expenses 65 years, we compared the average MNE per month to the national average as an outcome variable. We selected predictor variables that may have correlated with MNE. We investigated basic characteristics such as age, sex, educational attainment, frequency of attending hospitals and neighborhood outings, physical ability, and psychological and cognitive abilities as the predictor variables. We first calculated the correlation between MNE and the frequency of attending hospitals. Then, we performed logistic regression to examine associations between MNE and the predictor variables. We calculated odds ratios and 95% confidence intervals for MNE. All statistical analyses were conducted using IBM SPSS statistical software ver.23 (IBM Corp.).

Totally, 39 (47.0%) subjects reported that their MNE were less than the national average. Multivariate analysis revealed the following results: those who had outings at least three times per week were approximately 70% less likely to reduce their MNE than those who went out less than three times per week (at least three times per week: odds ratio = 0.31 and 95% confidence interval = 0.096~0.973). Additionally, there was no correlation between each predictor variable.

A disability preventive program that improved outing frequency to at least three times per week may be a valid economic approach in community-dwelling older people.
Factors Associated With Snakebite Envenoming In The District Of Ampara, Sri Lanka

DGSKL Jayawardana
DGSKL Jayawardana; NMCK Arambepola; CA Gnanathasan; T Chang,
University of Colombo,Sri Lanka
Sri lanka subashinikl@yahoo.com

Snake bite is an environmental and occupational hazard among people living in the tropical and subtropical countries of the world. In Sri Lanka, snakebites occur predominantly in the dry zone owing to five highly venomous snake types. Rural agricultural workers are the most vulnerable to this risk which could lead to considerable morbidity and mortality among them. By identifying the characteristics of victims, environment and circumstances leading to the bite, precautions could be taken to reduce the incidence of snakebites.

The aim of this study is identifying the factors associated with snakebite in a rural district in Sri Lanka.

A community-based cross-sectional observational study was conducted among rural residents of at least 6 months in the district of Ampara. 2,500 households were sampled (50 households x 50 Grama Niladhari divisions in 10 divisional secretariat divisions) using a three-staged systematic random sampling method. An interviewer-administered questionnaire was used to collect data on the snake bite in relation to time, indoor and outdoor environment, person and circumstances leading to its occurrence. One sample test of a proportion (SND test) was used to assess the significance of associated factors.

Data were collected from 8707(1.76%) rural residents out of the 494686 district rural population. 153 Snake bite victims (1.75%) were identified within last 12 month. Of them, 88 were males, 65 females and 10 were children. statistically significant association (p < 0.05) of snake bite was found with being males(88;63.3) outdoor bites (119; 77.78% versus 34; 22.22% indoors), bare footed at the time of bite (106; 71.62% versus 42; 28.38% with shoe wear), being moved at the time of snakebite (119; 77.78% versus 34; 22.22% not moved); and with exposure of lower limbs at the time of the bite (107; 88.43% versus 14; 11.57% ). Further lower limb is more possible for snakebite (79.08%) and it could be mostly happen in the first 3 months of the year (46.40%). No relationship was found with the time of the day and adequacy of light.

Rural residents in the district of Ampara are at a higher risk for snakebite. It can mostly happen when people do farming and outdoor activities. Public health interventions should focus on adding safety measures for farmers and agricultural workers when working in agricultural settings.
Factors Associated With Utilization Of Dengue Clinical Practice Guideline In Management Of Adult Patients Among Malaysian Doctors

Mohd Izhar Ariff
Abqariyah Yahya; Rofdzah Zaki; Roza Sarimin; Mohd Izhar Ariff; Izzuna Mudla Mohamed Ghazali; Balvinder Singh Gill; Zailiza Suli; Mohd. Aminuddin Mohd. Yusof; Nafisah Ahmad Lutfi; Sin Lian Thye; Fatanah Ismail; Vinoth Viknesh; Maimunah Mahmud; Rugayah Bakr
Julius Centre University Malaya, Department of Social & Preventive Medicine, Faculty of Medicine, University of Malaya, 50603 Kuala Lumpur, Malaysia.
Malaysia
mdizharibnuariff@gmail.com

Clinical Practice Guideline (CPG) management of dengue infection in adults (revised 2nd edition) has been published and disseminated in 2010 to provide evidence-based guidance in the management of dengue infection in adult patients. However not all doctors utilizing this in their practices, and factor associated with utilization of the dengue CPG by the doctors remain uncertain.

The aim of this study is to identify the factor associated with utilization of the dengue clinical practice guideline (CPG) in adults among the clinician in Malaysia.

A cross-sectional survey was conducted among 860 registered medical practitioners both in public and private Health Clinics and Hospitals in Malaysia (at primary care and hospitals from Medical and Emergency Departments).

Most of the doctors (634 or 74%) responded to the survey. Majority of the doctors were aware of the dengue CPG (585 or 92%). Out of 585 doctors that were aware, 544 (93%) were utilizing the dengue CPG. There were significant association between the age group of the doctors (p< 0.01) and gender. Male doctors were less likely to utilize (91%) compared to female doctors (98%) with p=0.003. A significant association was observed between the type of facilities and the level of CPG utilization. Majority of doctors from public facilities utilized the CPG (98%) compared to doctors from private facilities (86%) (p =0.03) Other factor such as designation of the doctors, the department and region of the facilities shows no significant association with the utilization. In conclusion, Doctors in both public and private facilities are mostly aware and utilizing the dengue CPG. Female gender and public doctors were among factors associate with CPG utilization. Therefore effort to improve utilization of this CPG should focus more on male doctors and doctors at private practices.
Factors Related To Preventive Behaviors Of Chikungunya Infection Among Rubber Plantation Workers In Rayong Province, Thailand

Charnchudhi Chanyasanha  
Charnchudhi Chanyasanha; Masahiro Zakoji; Dusit Sujirara  
Faculty of Public Health, Mahidol University, Bangkok, Thailand  
Thailand  
charnchudhi.cha@mahidol.ac.th

Chikungunya (CHIK) infection is one of the viral mosquitoes borne disease in Thailand and spread in many provinces with different magnitude of many regions. Many outbreaks occurred in rubber plantation workers occupation. Preventive behavior is very important and interest to study for prevention and control of the disease especially on this group workers.

The objectives of this study aimed to determine the preventive behavior on CHIK infection and to analyze the factors related to preventive behaviors among rubber plantation workers.

Cross sectional analytical study was designed and conducted with 302 adult rubber plantation workers in two selected districts of Rayong Province, Thailand. using a simple random selection. The data were collected and interviewe by health volunteers using a pre-tested and structured questionnaire.

Among 302 households with 1,180 residents of selected districts, 298 questionnaires were done by structured questionnaire. Factors related to preventive behaviors of CHIK infection found with statistical significant association were religion (p=0.020), neighborhood infections (p=0.004), family infections (p=0.006), knowledge (p=0.001), attitude (p=0.027), source of information on CHIK (p=0.027) and governmental support (p=0.001).

Conclusion: Factors related with preventive behaviors with statistical significant association found in many variables which will be useful for set up the strategies for control of CHIK infection. The results also indicated that a variety of sources of disease information and official support were crucial in upgrading preventive behaviors.
Factors Related With Hand Washing Using Soap Practice Among Mothers In Fishing Village Of Muara Angke, North Jakarta, Indonesia

Intan Silviana Mustikawati
Intan Silviana Mustikawati
Universitas Esa Unggul
Indonesia
intansilviana@esaunggul.ac.id

Hand washing with soap's program is part of health and hygiene behaviors at the household as an effort to empower members of the household to accept, willing, and able to do health and hygiene behaviors. Based on the survey of the Joint Monitoring Program (JMP) in 2004, it was found that people who washed their hands with soap at five critical times (before preparing food, before feeding a child, before eating, after cleaning child defecation and after defecation) less than 15%. Based on the results of Basic Health Research, it was found that the percentage of hand washing with soap not yet reached 50%. The results of the WHO study (2007) showed that the incidence of diarrhea can be decreased by 45% with the practice of hand washing with soap.

The purpose of this study is to analyze factors related to the practice of hand washing with soap among mothers in Fishing Village of Muara Angke, North Jakarta.

This type of research is an analytic study with cross sectional approach. The sampling technique used is saturated sampling with 72 respondents. Analysis data for this research is using statistical test $\chi^2$.

The average age of the respondents is 30 years old, elementary and junior high school education (32.5%), have income between Rp 1,000,000.00 to Rp 3,000,000.00 (65%), and never participated in health education (57.5%). Mothers in Fishing Village of Muara Angke have good knowledge of hand washing with soap (65%), and have good practice of hand washing with soap (80%). Based on statistical test $\chi^2$, it was found that there was a significant relationship between the knowledge of hand washing with soap, hygiene water facilities, and income with the practice of hand washing with soap ($p$ value <0.05) among mothers in Fishing Village of Muara Angke, North Jakarta.

The results are expected to formulate an implementation model of hand washing with soap practice, include community development and public-private partnerships, and increase the activity of communication, information, and education of hand washing with soap in a sustainable manner in order to improve hand washing with soap practice among mothers in Fishing Village of Muara Angke, North Jakarta.
Factors Upon The Supportiveness Of Taipei Citizen Towards Outdoors Smoke-Free Environment

Fang-Yuan Sheu
Hsiu-Lian Lin; Men-Qhuey Lin; Yu-Ting Tseng; Kuan-Feng Liu; Fang-Yuan Sheu
Health Promotion Division, Department of Health, Taipei City Government
Taiwan (R.O.C.)
bossanova@health.gov.tw

The World Health Organization (WHO) has listed second-hand smoke as the main reason for carcinogen. According to the Tobacco Hazards Prevention Act in Taiwan, most of the indoor public areas and some sections of outdoor areas are smoking-free. In order to promote and protect the rights of citizens for avoiding second-hand smoke, Taipei City Government actively setting up outdoor friendly smoke-free environment.

To better understand the supportiveness of our citizens. Taipei City Government conducted a telephone survey on 18-year-old citizens selected from stratified random sampling(n=2,010) on Sep. 2014.

The results show that 93.5% and 71.9% of the citizens are supportive and satisfied, respectively. According to the Chi-square test of independence, gender has a statistically significant difference between the supportiveness (p<0.05). Female are more supportive compare to male; education level also has a statistically significant difference between the supportiveness (p<0.05). Citizens graduated from junior high school are more supportive than citizens with university degree. In summary, most citizens in Taipei City support and are satisfy with the idea of promoting friendly smoke-free environment, while gender and education level are possible important factors. It is suggested to consider the difference in gender and education when formulating and promoting smoke-free policies in the future.
Failure Of Exclusive Breastfeeding In Infant Aged 0-6 Months In Makassar

Fairus Prihatin Idris
Nurlinda; Fairus Prihatin Idris
Universitas Muslim Indonesia
Indonesia
fairus.p.idris@gmail.com

Based on the research in 2005 - 2011, UNICEF found that Indonesian infants who received exclusive breastfeeding during the first 6 months was 32% and 50% of children given breastfeeding to the age of 23 months. This percentage is low when is compared with other developing countries. Exclusive breastfeeding is known to benefit and impact as well as being mandated by the constitution, but the tendency of mothers to breastfeed exclusively is still low. Riset Kesehatan Dasar in 2010 showed a decrease in the percentage up to 6 months only 15.3% and formula feeding increased three times from 10.3% to 32.5%. Breastfeeding in less than 1 hour after the baby is born the highest in the East Nusa Tenggara (56.2%) but in South Sulawesi is only 30.1%. In Makassar, exclusive breastfeeding lowest coverage is in working area of Antang Perumnas Health Centre there are 33.3% and decrease to 30.39%.

This study aims to describe the failure of exclusive breastfeeding by the mothers knowledge, mothers work, Husband support, explanations of formula feeding, breastfeedig technique, and breastfeeding (IMD/ Early Initiation of Breastfeeding) at the working area Antang Perumnas Health Centre by the year 2014.

This type of research is a quantitative study with a descriptive approach. Samples were mothers who had infants aged 0-6 months who were not given exclusive breastfeeding. The entire population sampled to obtain as many as 71 respondents. Data collected by interviewing mothers in some neighborhood health center and through home visits were conducted using questionnaires. Data management is done through a process of editing, coding, entry and cleaning data. Furthermore, the data is processed and analyzed by using a computer and presented in table form that accompanied the narration.

Based on the results of this study showed that mothers who have sufficient knowledge of as many as 57 mothers (80.3%) and those who have less knowledge as many as 14 mothers (19.7%). This indicates that respondents only limited knowledge (level) know and understand just have not been able to apply coupled with the lack of participation of the husband in supporting exclusive breastfeeding, and their exposure to infant formula.

The type of work the mothers in Antang Perumnas Health Centre is mostly work as hosewive as many as 52 mothers (73.2%), and at least work as day laborers and entrepreneurs which each only as much as one person (1.4%). More respondents are housewives who do not give exclusive breastfeeding. This is because mothers feel that babies given exclusive breastfeeding will need more attention. So the mother chose to give complementary foods so that they can freely do their homework.
Husband supporting exclusive breastfeeding for as many as 16 people (22.5%) husband who do not support exclusive breastfeeding for as many as 55 people (77.5%). Thus mothers feel no urge or motivation from outside or from her self to exclusively breastfeed their baby.

100% of women exposed to advertising formula milk. Most of them give formula to their babies in the first days of birth, when the mother because they think that their milk production is less or do not meet the needs of the baby. Besides the incessant ads formula in TV, radio, magazines, pamphlets and shopping centers are also greatly affect the perception of exclusive breastfeeding mother in which the future mothers will prefer to give their children formula feeding compared to exclusive breastfeeding results in decreased and formula feeding is greatly increased.

Mothers who have breastfeeding technique good as much as 4 mothers (5.6%) and mothers with babies breastfeeding technique which is less as many as 67 (94.4%), In this study, the majority of respondents did wrong breast-feeding technique, and many mothers who directly provide breast milk to their babies without washing his hands before.

Which did breaseeding (IMD/ Early Initiation of Breastfeeding) as many as 51 mothers (71.8%) and those who did not perform IMD as many as 20 mothers (28.2%). Although the majority of mothers to act IMD but more than breast milk make it out as an excuse to give formula to their babies.
Financial Protection For Elderly In Nepal: Is It Enough For Achieving Healthy Ageing?

Sabina Wagle
Sabina Wagle; Jemish Acharya
Mahidol University
Nepal
sabushre@gmail.com

Ageing population is continuously increasing globally. In low and middle-income countries like Nepal where healthcare services and resources are poor, it will be a major challenge in future to address the need of aging population. Elderly in Nepal are facing difficulties, as they grow older. The social protection policy for older people is insufficient. The policy is limited to old age allowance of Rupees 500 (USD 6.5). Most of the elderly use this financial support for food, medicine and travel expenses. In countries like Nepal where healthcare services are received only out of pocket payment As healthy Ageing emphasized on age-friendly care to ensure the quality of life of older people, it is difficult for the elderly people to get access to medical services. The aim of this study is to measure the cost of elderly living for older people.

Improvement of social protection for aging population in Nepal. The study is a descriptive study. The data was collected among 100 elderly in community households in Kathmandu Valley in Nepal. The convenient sampling methods were used to identify the samples. The elderly aged from 70 years and above were interviewed using structured questionnaire. Those elderly who could speak, understand and listen were included in the study. The data was collected on the monthly expenses on Medical care, Fooding, Housing, Clothing and footwear, transportation and communication. The data was analyzed using mean of the expenses.

The mean age of participants was 74.92 years. Majority (85%) of the participants answered that the government old age allowance is not enough for their daily living. Almost all (95%) responded that they lack outgoing activities and are in need of social activities. The mean cost of spending on Medical care, Fooding, Housing, Clothing and footwear, transportation and communication in USD is 33.97, 32.43, 9.92, 4.45, 3.55, and 2.70 respectively. Majority of their cost is spent on medicines and hospital visits. Majority responded that some private hospitals provide free medical checkup for those above 65 years however the services are limited.

The findings suggest that the old age allowance is not enough although elderly use that allowance to purchase medicine, food, and clothing etc. This results clearly showed urgency of moving towards universal healthcare coverage to prevent bankruptcy while seeking healthcare services. There should be a mechanism to provide sufficient social protection for elderly for the physical, social and mental and spiritual well being in elderly lives. There is a need of strong and sustainable policy in action to help elderly to acquire healthy aging and have good quality of life. The findings suggest that the old age allowance is not enough although elderly use that allowance to purchase medicine, food, and clothing etc. There should be a mechanism to provide sufficient social protection for elderly for the physical, social and mental and spiritual well being in elderly lives. There is a need of strong and sustainable policy in action to help elderly to acquire healthy ageing and have good quality of life.
Finding The Most Effective Cigarette Warning Label: What Is The Best For Indonesian General Population

Ajeng Nurina Ayuningtyas
Aghnia Dima Rochmawati; Ajeng Nurina Ayuningtyas
Faculty of Public Health, Universitas Indonesia
Indonesia
dimyeah@gmail.com

According to 2013 Basic Health Research, 29.3% of Indonesian population is smokers. Largest proportion of Indonesian smokers are made of 30-34 year old with the percentage of 38.5%. 45% of Indonesian 13-19 year old adolescents is also smokers and still increasing. With a lot of smoker population, cigarette warning labels have evolved into many different forms, from text-only form into one with very graphic image of the health consequences of smoking behavior. Despite the changes, Indonesia is still in quest of the most effective cigarette warning label which can best help conveying smoking behavior consequences to the Indonesian population. Therefore, this paper intends to help identifying important aspects of the most effective cigarette warning label for Indonesian smokers and non-smokers population in general. The method that was used for this study was literature review on official statistics such as 2013 Indonesian Basic Health Research, international status reports and scientific journals.

Indonesia cigarette graphic warning labels has the proportion of 40% from the package in front and in the back. Indonesia is ranked 79th from 144 in terms of the quality of graphic warning labels specification while Thailand is ranked as the 1st with 85% proportion in front and back based on the tables published by Canadian Cancer Society. Recent study in Surabaya, East Java by Widari shows that 60% respondents could not recall complete information from the cigarette package warning labels. One of the reasons is the packaging with various color and brands are easily distracting consumer from the important information. Canadian Cancer Society states that plain packaging would curb the industrys use of the package as a promotional vehicle, would increase the effectiveness of package warnings, would curb package deception, and would decrease tobacco use. Article from Germain et. al demonstrates that when a cigarette pack is progressively stripped of its color, imagery, and branded fonts, adolescents perceive packs as less appealing. Research conducted for the Canadian Government found that warnings occupying 75% of a branded packs face were more effective in eliciting negative perceptions and conveying information about the health risks of smoking to adult smokers as compared with warnings occupying 50% of a branded packs face. Study from the Tobacco Free Kids Campaign found that a larger graphic warning labels means that warnings are more visible, more important, and have more impact. A larger size allows for bigger and better pictures, a larger font size and/or additional information, including cessation information. Further, a larger size makes it more difficult for the branded promotional part of the package to distract the consumers attention away from the warning. It is also important for the warning labels to have a clear and explicit messages to prevent a mixed messages between the consumers. Warning labels also must be rotated periodically to avoid over exposure because existing messages can lose their impact overtime. Warning labels should always be novel and up-to-date with the needs of the consumer. There has not been a complete and thorough research about graphic warning labels on cigarette packages in Indonesia, therefore this topic should be discussed further.
First Law Of Geography In Evaluating The Larva Monitoring Program, A Case Study

Widyawati Sumadio
Widyawati Sumadio; Ayumi Arai; Irene Sondang
Department Geography Universitas Indonesia
Indonesia
widyawatihs@gmail.com

Since 2007, through larva monitoring training program, the government began a program to empower the community in response Dengue Fever disease spreading. In the training housewives are prepared to become larva monitoring person (lmp). The lpm responsibility is to count the number of larvae in an area and determine the status of the area. However, the result of the data monitoring is not always concordant with the monitoring plan. This means that the monitoring schedule is not completed. On the other hand, the government through the Urban Village officers and the primary health center staffs, has not developed a program that uses the monitoring larva results as baseline data. Prevention programs that been developed by the primary health center do not consider the larva monitoring result as one of its input as well.

Base on the situation background above, this study aims to determine the weaknesses of the monitoring larva program from two sides, namely from the larvae monitoring person (lmp) and from the monitoring results user's side, namely the government. The research question are: 1. How do social and physical distance influence the lmp performance in accomplishing their responsibility? 2. Does the organization structure and job assignment of the officers and staffs encourage them to fulfill the larva monitoring program? 3. Concerning to the larva monitoring program, do distance has any influence to the urban village officers and health center staffs performance?

This study used two methods in collecting data, that is observation and interviews with key informants. The observation was conducted to the larvae monitoring activities. Researcher observed the skills and attitude of lmp. In the observation process, researcher used several indicator to measure the lmp skills and attitude. While interviewed to the lmp was to determine their knowledge and sense of belonging by using the first law of geography that is social and physical distance. The in depth interviewed was conducted by using structured and unstructured interview guide. In depth interviewed also applied to the urban village officers and health center staffs. The requirements of the key informants are those who are involved in this program for at least 3 years and understand the difficulties in implementing the program. The in depth interview was to discover the difficulties in using larva monitoring data as information to develop programs. The difficulties was measure by two factors, that are inward factor and outward factor. The inward factor was determine through the individual characteristics in looking the program, and the outward factor is the opinion to their job assignment. The individual characterics include the social distance that describes by individual knowledge of the working area variables. While the outward factor was describes by their workload perspectives. The interviews results to the urban village officer and health center staffs were criss-cross to the organization structure and their main duties according to the decree.
The observation indicate that most lmp knows the procedure and know how to count the larva in containers that filled with water. Nevertheless, some have a more thorough way. In fact they have the initiative and also act as health adviser volunteers. While some are just doing their job and do not indicate a high concern. Base on the in depth interview to lmp, it turns out that lmp with high responsibility tend to have strong relationship with the area or the people that leave in the surrounding. This kind of lmp have close social distance with the area and with people. While they who showed low level of carefulness usually are migrants that been living less than a few years in the area. They do not have strong place attachment. Physical distance does not have any correlation with sense of belonging to the area.

Base on the in depth interview to the urban village officers and health center staffs, researcher categorize the result as the inward and outward looking of the informants. The inward looking showed that the larva monitoring data that been collected was not being used because the urban village officers and the health center staffs already occupied by the high diversity of their daily tasks. Their daily tasks do not give them chance to add an extra assignment. Furthermore, most urban village officer and health center staffs were not people that reside in the area. Their involvement with the neighborhood problems are not as high as they who live in the area. Even in the daylight they stay and work in the area, their social distance to the place is quite distant. This means that the government officers do not have any close relation with the program nor the area. The outward looking perception showed that in addition to the high workload, they also feel that the utilization of such data is not their duties. Not any of the decree that they comprehend of, mention the utilization of the larva monitoring data collection. In the other hand, the structure of the organization does not allow the additional tasks to be transferred to other unit. This situation also happened to the health center staffs. To make the program successful, we need to rethink a new approach either in recruiting the lmp and developing the unit that in charge of this program.
Floods And Health Services: A Lesson Learnt From Big Floods Event Of Jakarta

Prof. dr. Purnawan Junadi, MPH, Dr.PH

Faculty of Public Health, Universitas Indonesia
Indonesia
purnawan.junadi@gmail.com

Disaster risk management for health is multi sector approach and refers to: the systematic analysis and management of health risks, posed by emergencies and disasters, through a combination of (I) hazard and vulnerability reduction to prevent and mitigate risks, (ii) preparedness, (ii) response and (iv) recovery measures - (Global Platform, WHO, UNISDR, Health Protection Agency, 2011).

The ideal conditions are not performed optimally in the city of Jakarta when subjected to severe flood events in 2011 and 2013. The direct health impact in question is the victim died, the victim of respiratory and skin diseases. As for the indirect impact is the high transmission of an outbreak of post-flood diseases such as diarrhea, dengue fever, leptospirosis, etc.

To know a lesson learnt about disaster risk management in health service from health service big floods event of Jakarta

The methodology used in this paper was a mix of used methods ranging from desk study through the existing literature, in depth interview to the FGD activities involving various stakeholders associated with health care.

The results obtained were the obstacles encountered in the handling of health crisis caused by flood in Jakarta, among others: health-related information systems did not function properly, the mobilization of external assistance was still hindered by the disaster site transportation issues, financing difficulties, lack of early warning system, and logistical constraints.
Food Consumption Pattern And Other Associated Factors Of Overweight/Obesity And The Prevalence Of Dysglyceamia/Diabetes Among Employees Attached To The Ministry Of Economic Development

G.S.Sumanasekara
G.S.Sumanasekara, A.Balasooriya
Ascend Research Network
Sri Lanka
sagarika_sumanasekara@yahoo.com

In Sri Lanka studies reveal higher trend in prevalence of diabetes. The office employees have sedentary life style and their eating patterns changed due to nutritional transition. Further overall, urban and rural pre diabetes is also increasing.

Study the general food pattern of office employees and its relation to overweight/obesity and prevalence of diabetes among them. The data was collected from office employees between 30-60 years (n=400). Data analyzed using SPSS 16 version. The Study design was a descriptive cross sectional study. The study setting was Ministry of Economic Development. Anthropometric measurements and blood glucose assessed by trained nurses. Dietary pattern was studied through a food frequency questionnaire thereby calculated daily nutrient intakes.

Mean age of office employees were 38.98 SD (7.033) CI=95%) and 245 females (61.2%) 155 males (38.8 %), Nationality includes Sinhala (67.5%), Tamil (20%), and Muslims (12.5%). Overweight (71.8%), obese male (36.9%), obese female (66.16%)/diabetes/obese (18.4.5%) out of 127 (31.8%) who were above the normal BMI whereas 273 (68.2) were within the normal. Mean BMI was 24.1593. Mean Blood sugar level was 104.646, SD (16.018). 12% consume tobacco products, 17.8 consumed alcohol. 15.8% had nutrition training.

Two main dietary patterns identified who were vegetarians and non vegetarians. Mean energy intake 1727.1, (SD 4.97), Mean protein consumption (11.33, SD 1.811), Mean fat consumption (24.07, SD 4.131), Mean CHO consumption (64.56, SD 4.54), Mean fibre (30.05, SD 17.9), Mean cholesterol (16.85, SD 17.22), Energy intake was higher in non vegetarians and larger proportion of energy derived from proteins , and fat. Their carbohydrate and cholesterol intake was also higher. Tamils were mostly vegetarians. Mainly BMI were within normal range (18.5-23.5) whereas Muslims who had higher energy intakes showed BMI above the normal.
Food Handler's Practice And Escherichia Coli Contamination In Food And Beverages In Cafeteria In A Campus

Dewi Susanna
Dewi Susanna; Yvonne M Indrawani; Zakianis; Tris Eryando; Lassie Fitria; Dwi Oktaviana; Fidyatun Khoiriyah
Universitas Indonesia
Indonesia
dsusanna2@yahoo.com

Proper hygiene and safe food handling and preparation practices are keys to preventing the spread of Escherichia coli. A University is responsible to control of food and beverage that served in all cafeterias.

The objective of this study was to know the association between food handler’s practice and the existence of E. coli in food and beverages served in cafeterias in a campus. The aim of this study was to determine the relationship between the use of contraceptives with age in women factory workers in Sukabumi, Indonesia.

A descriptive cross-sectional study with structured questionnaires was carried out among 168 food handlers from all cafeterias in a campus located in Depok, Indonesia. The measurement of E. coli used Membrane Filter Method conducted in Laboratory of Environmental Health, Faculty of Public Health Universitas Indonesia. The enumerators were students from the faculty and trained in data collecting and samples. Chi-square tests were applied and logistic regression analysis was performed to measure the association.

The characteristic of respondents showed that most of food handlers in cafeteria was female (56%) and most of them (60.1%) had low education (< Senor high school). There were 67.1% food handlers have not been educated about food hygiene and sanitation. The Chi-square tests showed that there were 5 points that could be risk factors for E. coli contamination (p<0.05). Those were a health status (p=0.028), talking while working (0.008), had hand hygiene (0.012), wearing apron (0.04), wearing hair restrain (0.006), and using of registered canned food (0.05). The logistic regression found two variables protective in contamination, there were wearing hair restrain (OR=0.18: 0.34-0.95; p=0.043) and using registered canned foods (OR=0.11: 0.02-0.79; p=0.028).
Health Facility Or Hospital Birth: Are The Determinants For Use Different In Vietnamese Women?

*Tina Lavin*
*Tina Lavin; Elizabeth Newnham; David Preen*
University of Western Australia
Australia
tina.lavin@uwa.edu.au

Strategies to reduce neonatal mortality target increased access to skilled birth attendants and emergency obstetric care (1). In 2002, 79% of live births in Vietnam occurred at a health centre or hospital (institutional delivery) with 21% at home (2). Although there has been a considerable amount of work investigating determinants for institutional delivery in Asia (3-5), few studies have investigated determinants for the different types of delivery service providers, such as community-based health facilities or hospital. This is particularly important for Vietnam as there is a commune health centre (CHC) located in every commune, but access to hospital is only at the district level (6). Qualitative work in Vietnam has shown that different factors influence CHC or hospital birth (6), for example, delivery at a CHC was considered cheap/affordable compared to hospital delivery. This suggests the determinants for CHC and hospital delivery in Vietnam may be different.

The aim of this study was to explore sociodemographic and pregnancy-related determinants for women delivering at a health centre or hospital in Vietnam. It was hypothesised that the determinants for health centre delivery are different to those for hospital delivery and additionally that women living rurally, with lower household education, from ethnic minority groups, with higher parity, lower wealth index, and lower antenatal care would be less likely to seek health centre or hospital delivery.

This retrospective descriptive study used data obtained through the international Young Lives Study (7). Around 2000 children (and their mothers) were sampled from 31 communes across Vietnam using multi-stage, purposive and random sampling in 2001-2002. Surveys were administered to mothers through local research assistants to capture self-reported information on a range of sociodemographic, pregnancy-related and health service use information for the participants most recent pregnancy. The Young Lives Study was approved by the London School of Hygiene Ethics Committee.

The main outcome variable examined was self-reported location of delivery, with three possible categories: home, health facility or hospital. A range of potential predictors were selected based on possible factors influencing birth location identified in the literature. These included sociodemographic factors such as age of mother, marital status, household head, household size, caregiver can speak Vietnamese, ethnic group (Kinh or other) geographic location (urban/rural), primary education level and wealth index. Pregnancy-related factors were also explored including level of antenatal care, pregnancy experience, difficult labour, prematurity and parity.
Multinomial logistic regression modelling was used to determine predictive factors for delivery at a health facility or hospital compared to homebirth with adjusted odds ratios (ORs) and 95% confidence intervals (95%CIs) calculated.

Most women reported an institutional delivery (hospital n=815, 45%; health facility n=561, 31%), with 24% (n=436) of women giving birth at home. Women from ethnic minorities, with higher parity, lower household education level and lower level antenatal care, were less likely to have institutional delivery, consistent with findings from previous studies in low income countries (1, 3, 5). In terms of type of health service use, living rurally significantly decreased the odds of health facility delivery (OR=0.29; 95%CIs 0.13-0.66) but not hospital delivery and lower wealth index was associated with lower odds of hospital delivery (OR=0.46; 95%CIs 0.28-0.74). Primary education level, antenatal care (ANC), difficult labour, child born before expected and decreasing parity were all significantly associated with an increased odds of hospital delivery, compared with health facility delivery, ranging from a 23-234% increased odds.

The current findings are unique in demonstrating that different factors influence the likelihood of delivery at a health facility or hospital in Vietnamese women. For example, living rurally decreased the odds of health facility delivery but not hospital delivery, whereas a higher wealth index increased the likelihood of hospital delivery but had no significant effect on health facility delivery. This study found that sociodemographic and pregnancy-related determinants for health facility and hospital delivery were different for a number of factors in this population, having important implications for policy development. For example, reducing direct and indirect costs may be successful at reducing barriers for hospital delivery but may have little impact on health facility delivery. The promotion of ANC to all women and delivery services to multipara women is particularly important. These should be accompanied by redistributive policies to decrease the inequity in maternal health service utilisation between disadvantaged groups (ethnic minorities, lower education levels) and the rest of the population.
Health Hazard Identification To Cleaning Workers In Jakarta And Surroundings

L Meily Kurniawidjaja
Meily L. Kurniawidjaja; Fatma Lestari; Yuni Kusminanti; Ike Pujiriani; Bogar Baskoro
a. Centre for Assessment & Application of Occupational Health & Safety, Occupational Health & Safety Department, Faculty of Public Health, Universitas Indonesia, Depok, Indonesia b. The Indonesian Medical Association for Occupational Health, Jakarta, Indonesia
meily.widjaja@gmail.com

Cleaning service is a basic need in all activities including in the office. Office cleaning workers are exposed to ergonomic, physical, chemical and biological hazard, which can cause acute and chronic health outcomes, even death by the carcinogenic agent. This study aimed to identify working condition, exposures and health outcomes amongst the office cleaning service workers. The study design was a semi-quantitative survey using a sequential explanatory method. Number of respondent were 136 cleaning workers, key personnel were 7 leaders and 6 representatives from 6 companies, located in Jakarta and it’s surroundings. Data were collected using questionnaire, in-depth interview, observations and document review.

The study found most of the cleaning service providers were outsourcing as contractual basis (83.33%), were categorised as a small (16.67%) and very small enterprises (83.33%). Most of the cleaning service workers (94.44%) were hired on a freelance basis (94.44%). A variety of activities including building cleaning, furniture, toilet, dustbin, savage, gardening and moulding, water gallon distribution, beverage services. The cleaning service workers were very few well trained., and their safety and health were not under control of the ‘host companies’.

Results showed workers exposed in high health and safety hazards i.e. slips, trips or hits by falling objects; chemical via dermal contact or inhalation to detergent, disinfectant, glass and toilet bowl cleaner include all-purpose cleaner i.e. chlorine, ammonia, 2-Butoxyethanol, and pesticides i.e. organophosphates. The ingredient was mostly unknown and few MSDS provided; biological hazards including microorganism, mosquitos, mice, ants and wild dogs. Ergonomic hazards derived from heavy and repetitive lifting and carrying; physical hazards include sunlight, dust, noise and vibration.

Most of the workers (94.44%) experienced skin rash or itching (skin irritation) and coughing related to the chemical used. Most common disorders were flue or flue-like syndromes, musculoskeletal symptoms (55%) mainly upper limbs or back pain, and Dengue (13.89%). Most injured body’s part were hands, fingers, feet and ankle.

We concluded, Cleaning service workers were exposed to chemical, biological, physical and ergonomic hazards. It was suggested workers’ health and safety should be responsibility of cleaning service provider, MSDS must be provided, OHS awareness session to host companies, providers, and workers; skill training at least for hazards communications, proper usage of chemical, spill management, basic life support, and fire fighting. Chronic diseases were not found; need further research on causal-effect multivariate investigations.
Health Literacy In Taiwan: A Population Based Study

Duong Van Tuyen
Duong Van Tuyen, MSc; I-Feng Lin PhD; Kristine Sorensen, PhD; JÅrgen M. Pelikan, PhD; Stephan Van Den Brouke; PhD, Ying-Chin Lin; Peter Wushou Chang, MD, ScD
Taipei Medical University
Vietnam
duongtuyenvna@gmail.com

Data on health literacy in the population is limited for Asian countries.

This study aimed to test the validity and accessibility of the HLS-EU-Q for use with in the general public in Taiwan.

A cross-sectional study was conducted with multistage stratification random sampling resulted in a sample of 2,989 people aged 15 and more. The HLS-EU-Q was validated by confirmatory factor analysis. The general HL of the Taiwanese population was 34.4±6.6 on scale of 50, slightly higher than those in Japan and most European countries.

Multivariate regression analysis showed that general HL is positively associated with the ability to pay for medication, self-perceived social status, frequencies of watching health-related TV, and community involvement, but negatively associated with age. Health literacy is also correlated with health status, health behaviors, and healthcare accessibility and use. The HLS-EU-Q was found to be a useful tool to assess HL and its associated factors in the general population.
Health Planning And Budgeting:   Economic Process Or Political Process ?
(Case Study In Three Districts In East Java)

Ernawaty
Ernawaty
Faculty of Public Health, Airlangga University
Indonesia
erna_erjef@yahoo.com

Indonesia’s decentralization policy has been operative since 2001. According to Government Ordinance No. 38 Year 2007 and Act No. 23 Year 2014, it is mandatory for districts to regulate their own health affairs. Although was made on a good premise that local government best understands about its own issues and therefore devises the best solution, the policy was reported not to achieve its normative goals.

The study aims to analyze the process of health planning and health budgeting in 3(three) districts in East Java, i.e. Mojokerto, Sidoarjo and Trenggalek

The research method is qualitative phenomenology. In 4 (four) months, the data is self-gathered through in-depth interview with 17(seventeen) informants who are chosen through snowball method.

The result demonstrates an existing political process throughout the process of health planning and health budgeting, from the devising of the work plan to the establishment of the law draft. There were political bargains over the form of the government program and its budget. Disputes over a programs target location were also detected. Districts mayor influenced highly on setting up priorities over different development goals while legislators often conducted a program in such a way that it benefitted their constituencies. All of the above activities influenced the attainment of the health planning and health budgeting and, thus, also influenced the overall success of the health sector. In conclusion, the process of health planning and health budgeting is not a merely economical process; it contains within a powerful political process.
Health Profile Of The Aged People Living With HIV: A Community-Based Study In Northern Thailand

Tsutomu Kitajima
Tsutomu Kitajima; Saiyud Moolphate; Myo Nyein Aung; Hiroshi Okamura; Chitima Katanyoo; Virat Klinbuayaem; Yaowaluk Siriwarothai; Piyaporn Takamtha; Malcolm Field; Osamu Noyama
Kyorin University
Japan
kitajima@ks.kyorin-u.ac.jp

Rollout of antiretroviral therapy (ART) has been prolonging the lives of people living with HIV (PLHIV) in low and middle-income countries. Consequently, the proportion of PLHIV aged 50 years and older is increasing in every region of the world. In 2012, it was 8% in Asia and Pacific. Aging of the HIV epidemic poses new challenges to HIV treatment because, in addition to ART, many of them would need medical as well as welfare services for their chronic and degenerative conditions. Thailand is one of the countries that have achieved universal coverage of ART and therefore is expected to face such issues in the near future, but the information of PLHIV aged 50 years and older is scarce.

The objective of the study was to describe clinical, functional as well as mental conditions of the aged HIV in a rural community in northern Thailand.

We conducted the study in a district in northern Thailand. The participants of the study were the patients receiving HIV treatment at health facilities in the district who were 50 years old or older at the time of the study. We received an approval from the ethics committees of Kyorin University and Chiang Mai Provincial Health Office and obtained informed consent from all the participants. We interviewed them with a structured questionnaire that included socio-demographic information, comorbidities, Barthel Index activities of daily living (ADL), instrumental activities of daily living (IADL), and Geriatric Depression Scale 15-items (GDS15). The data collection was conducted from February to July 2015, at a community hospital and at patients home if they were unable to be interviewed at the hospital. We used SPSS for statistical analyses.

Of 219 participants in the study, 112 (51.1%) were male, 60 (27.4%) had secondary education or higher, 180 (82.2%) had an occupation, and the median monthly income was US$145 (US$1=34.41 Thai Baht). Their average age was 55.4 (±4.7) years and 34 were aged 60 and older (15.5%). On average, they were diagnosed HIV positive at age of 42.2 (±7.8) and 13.8% and 1.5% were diagnosed in their 50s and after 60s, respectively. Of those who were receiving ART, 21.4% initiated it after they became 50 years old. Current HIV prevention efforts in Thailand focus on youth and sexual minorities, but it would be also important to introduce culturally appropriate HIV prevention programs for those aged 50 and older. Regarding their self-rated health, 200 (91.3%) responded very good/good, but 125 (57.1%) had at least one chronic disease. Among them, 61 (48.8%) had two or more diseases. Hyperlipidemia was the most prevalent (n=84), followed by hypertension (n=63), and diabetes mellitus (n=13). Regarding their functional health that was measured by Barthel Index of ADL, 182 (90.1%) were able to independently conduct their daily activities (score=20). The lowest score was 13. Seven persons (5.7%) needed help for using toilet, 9 (5.0%) and 12 (6.0%) had problems with bowels and bladder, respectively. Regarding IADL, 7 (3.2%) needed help for shopping,
6 (2.7%) for traveling, 5 (2.2%) for food preparation and housekeeping, and 3 (1.4%) for handling finances. Regarding their mental health, the average score of GDS15 was 2.8 (±2.6). The numbers of people who were recommended to have their mental health conditions checked by a physician (scores between 6 and 10) and those who needed to see a physician about their depressive condition (scores between 11 and 15) were 23 (10.6%) and 5 (2.3%), respectively. Sex, age, education, marital status, and occupation had no association with GDS15 score, whereas higher monthly income (p<0.05) and better self-rated health (p<0.01) were significantly associated with lower scores of GDS15. Overall, the participants reported good health and appeared to be functionally independent in their daily lives. It will be important to consider ways to integrate medical services for HIV, chronic diseases, and depressive conditions in the existing health care system. Further studies are necessary to monitor changes of their health conditions and investigate factors associated with them. It would be also important to compare them with those of HIV negative people in the same age group in order to understand health needs pertinent to the aged HIV.
Health Risk Analysis Of Particulate Matter 10 (Pm10) Exposure Among Readymix Workers Of Pt. X Kebon Nanas Plant, East Jakarta 2015

Isnatami Nurul Azni
Isnatami Nurul Azni; Bambang Wispriyono; Meliana Sari
Department of Environmental Health, Faculty of Public Health Universitas Indonesia
Indonesia
isnatami05@gmail.com

In Jakarta, infrastructure development urges the emergence of Concrete Bathing Plant which aims to facilitate the reach to the construction site. Concrete or further be defined with Ready-mix, produce particulate during its production. Workers who exposed to the particulate from the workplace affect the incidence of occupational-related diseases so the workers are not able to work productively.

To protect the workers from occupational-related diseases and evaluation of threshold limit value of particulate matter in workplace for Indonesian-local specific

Located at Kebon Nanas plant of PT. X, this study uses environmental health risk assessment design. Health risk was expressed as Risk Quotient (RQ) which calculated by comparing the daily dose of exposure to PM10 (CDI) with reference concentration (RfC). PM10 was measured in six points using Low Volume Air Sampler. Using population proportion sample size, a total 70 workers were drawn from six departments of the company. When the RQ > 1, indicated that there is potential health risk that should be considered.

The result of highest concentration was 0.407 mg/m3 and the lowest concentration was 0.167 mg/m3. Those concentrations are still lower than threshold limit value regulation from The Minister of Manpower and Transmigration, Indonesia (Permenakertrans 13/2011). The calculations of the real time risk showed that 21.4 percent of workers are not safe from a health risk (RQ > 1.0). While only 2 workers are safe from life time risk. The limit concentration of PM10 to be safe to work is 0.08 mg/m3 for 11 hr/day and 362 days/year. It is recommended that health risk management should be improved and evaluation of threshold limit value of particulate matter in the workplace for Indonesian-local specific workers should be considered. Considering the concentration of PM10 did not measured by personal inhalation, the health risk obtained from this study could be either overestimated or understated.
Health-Related Television Viewing And Health Training Moderate The Decline Of Health Literacy With Age In Women

Duong Van Tuyen
Duong Van Tuyen, MSc; Kristine Sorensen, PhD; Jürgen M. Pelikan, PhD; Stephan Van Den Brouke, PhD4; I-Feng Lin PhD5; Ying-Chin Lin, MD, PhD1,6; Peter Wushou Chang, MD, ScD1,7,*
Taipei Medical University
Vietnam
duongtuyenvna@gmail.com

Health literacy is increasingly recognized as an important determinant of health. However, interactions between health literacy and personal variables remained to be determined. This study looks at the interactions between age, personal behaviors and health literacy in women population in Taiwanese.

A cross-sectional design with a randomly selected population of 1,644 Taiwanese women aged between 15 and 75 years completed the European Health Literacy Survey Questionnaire (HLS-EU-Q) in Mandarin. Information on their socio-demographics and health behaviors were included. Multiple linear regression models were used to examine the associations.

General health literacy was negatively related to age (regression coefficient b= -0.33; p< .05), and positively associated with higher social status (b= 0.68 ~1.79; p< .05) and ability to pay for medication (b= 2.07 ~ 3.84; p< .01) in a multiple regression model. Compared with women never watched health television program, those who sometimes, and often watched, their general health literacy in different age groups was significantly higher by 0.97 (b= 0.97; p = .017) and 1.04 (b= 1.04; p = .022), respectively. Receiving health-related training slightly modified decreased general health literacy (b= 0.44, p=.119). In conclusion, the decline in womens health literacy by age was moderated by watching health-related television in women population. Effective intervention programs could be explored and implemented to maintain their health literacy.
Hedonic Test And Nutrient Analysis Donut From Fruit And Peel Of Banana (Musa Paradisiaca) As High Fiber Alternative Food

Evi Nurhidayati
Evi Nurhidayati; Siti Arifah Pujonarti; Ratu Ayu Dewi Sartika
Faculty of Public Health, Universitas Indonesia Indonesia
evi.nurhidayati.ui@gmail.com

Dietary fiber is a substantial content in the plants that cannot digested in human intestine (Dreher, 2001). High fiber diet useful for body health because it can reduce the risk of degenerative or chronic diseases such as diabetes mellitus (Smith and Collier, 2001), cardiovascular disease (Marlett, 2001), breast cancer (Cho, Clark, and Rickard, 2001), prostate cancer (Schwab and Pienta, 2001), and colon cancer (Slavin, 2001). In 2013, Indonesia produced 6.279.290 ton of banana (BPS, 2013). High production of banana causes so many waste of banana peel. Banana peel (Musa paradisiaca) contains 14.31gram of dietary fiber per 100 gram (Ighodaro, 2012). Banana fruit (Musa paradisiaca) contains 1.9 gram of dietary fiber per 100 gram edible part (PERSAGI, 2009).

The main goals from this research are to know the acceptance, nutrient analysis, and also to make innovative product from donut that made from fruit and peel of banana (Musa paradisiaca) as a high fiber alternative food.

This research is an experimental research that using completely randomized design method that held on April until June 2015. Donut is produced in Nutrition Laboratorium of FPH UI. In this research, there are 4 kinds of donut that consists of 1 control and 3 formulation. Panelists for hedonic test in this research are 50 students of FPH UI and nutrient content is analyzed in Laboratorium PT Saraswanti Indo Genetech, Bogor, Jawa Barat. Analysis of hedonic test uses ANOVA and Duncans Multiple Test.

Based on the result of hedonic test, statistically, there are significant difference of acceptance from the panelists based on the color, aroma, flavor, and tenderness and also there are no significant difference based on the texture and whole score of the product. The most favorite donut is donut 683 that has formulation (dry basis) 75.8% of wheat flour, 5.82% of banana fruit, and 18.41% of banana peel. Donut 683 has nutrient content such as 338.91 kcal of energy, 55.78 gram of carbohydrate, 2.13 gram of soluble fiber, 9.12 gram of insoluble fiber, 4.31 gram of protein, 10.95 gram of fat, 073 gram of ash, and 28.23 gram of water/moisture per 100 gram donut. Based on the nutrient content, donut 683 can be consumed as a snack and it can fulfill 15.95% dietary intake (DI) of energy and 37.5% DI of dietary fiber for women on age 16-18 years old and 15.06% DI of energy and 35.16% DI of dietary fiber for women on age 19-29 years old. Donut 683 can also fulfill 12.67% DI of energy and 30.41% DI of dietary fiber for men on age 16-18 years old and 12.44% DI of energy and 29.61% DI of dietary fiber for men on age 19-29 years old. Additional of banana fruit and banana peel in formulation donut increase the amount of soluble and insoluble fiber in donut product. For the next research, formulation donut can be produced using other species of banana to know about the difference of nutrient content.
Helmet Use And Head Injury In Age Under 5 Years

Lucia Yovita Hendrati
Lucia Yovita Hendrati; Diah Indriani
Airlangga University
Indonesia
hendratilucia@yahoo.com

Head injuries cause decreased quality of life. Head injury at age <5 years due to a traffic accident caused by not using helmets. The behavior of the parents, the actual existence of a helmet or children <5 years, especially infants are not allowed to use motorbikes analyze the risk of the use of helmets against head injuries in children under five year

The study design was cross-sectional study. The study population were motorcyclists aged <5 years. Techniques of data collection using survey data Riskesdas 2013. Analysis of data is analytic Odds ratio with 95% significance.

Results showed 52% of children under five years old who suffered a traffic accident suffered head injuries. The use of helmets have a relationship with a head injury. Helmet usage behavior is influenced by knowledge, shared values, attitudes and regulations. In Indonesia there are no regulations that prohibit the baby to use a motorcycle.
Prevalence of Non Communicable Diseases (NCDs) and poor quality of life (QoL) among general population in Indonesia has increased over years. Studies showed that history of NCDs was determinant of decreased quality of life. These studies above were mainly conducted in general population, whereas numerous areas in Indonesia are considered as disaster-prone areas which its people are also vulnerable to have poor QoL. Kediri District is one of a disaster-prone area since it surrounded by Kelud volcano, an active volcano.

The study was intended to describe number of people with poor QoL, prevalence of NCDs and to identify the association of history of NCDs with poor QoL in Kediri District.

Secondary data from Basic Health Survey (Riskesdas) 2013 was used to conduct the study. Study population was people living in Kediri District and selected as Riskesdas sample. Those who had a complete data were then chosen as study sample. Health-related quality of life was measured by disability score with cut off point 19.4 for poor quality of life. Data analysis performed multiple logistic regression.

About 1872 samples were analyzed and generally 7.7% respondents suffered poor quality of life. One-fifth of them had at least one NCD and around 5,0% respondents had more than 2 NCDs. Hypertension was the most prevalence disease (8.7%) and followed by asthma and joint disease respectively (7.3% and 6.9%). Risk of having poor quality of life was 5.5 times higher among respondents who had history of NCD (PORadj 5.581; 95%CI 3.883-8.020) after be controlled by age, gender, education, economic status and level of disaster-prone areas. Number of people with poor QoL in Kediri District was lower than population in Indonesia. The finding was inconsistent with others that showed the increased number of poor QoL among people in disaster-prone area. During the data collection people were in normal situation since the last eruption occurred in 2007 effusively. As conclusion, the impact of NCD was also found in disaster-prone area. Promotion and prevention of NCD in these particular areas have to be improved and sustainable to increased people quality of life in order to prepare the upcoming disruptive disaster (volcanic eruption).
Hospital Management Program: Role Of CSR In Improving Leadership And Quality Of Hospital Services In Indonesia

Masyitoh
Ede Surya Darmawan, Amal C.Sjaaf, Masyitoh, and Vetty Yulianty P
Center for Health Administration and Policy Study (CHAMPS) Faculty of Public Health Indonesia
edesurya@gmail.com

In 2006 Government of Indonesia had launched a set regulation for public services that enacted government ran hospital to be more enterprises and more flexible in term of financial administration in order to improve its services. Following this situation, Center of Health Administration and Policy Studies (CHAMPS) Faculty of Public Health Universitas Indonesia formed a long term cooperation with a multi-national company called as Johnson and Johnson Asia Pacific Corporate Contribution (APCC) to implement Hospital Management Program (or HMP in short). HMP Indonesia aimed at improving leadership and quality of hospital services through provide capacity building for hospital CEOs and managers. The form of capacity building originally in a set of training, then followed by benchmarking to abroad hospitals and domestic, hospital administration laboratory, feedback and follow up survey, alumni gathering, hospital administration conference, and scientific hospital administration journal.

This paper aims to disseminate the idea of CSR without any product promotion in improving leadership and quality of hospital services in Indonesia and gather input from Asia Pacific point of views to improve the program and hospital services as well. Secondary Data Analysis, Feed Back and Follow Up Survey, and Discussion Hospital Management Program (HMP) has been implemented from 2007 up to at present. Total participants or beneficiary so far about 1.000 participant mostly from hospitals both government and private hospitals, policy maker from Ministry of Health, Provincial and District Health Offices, universities, and others institutions throughout Indonesia.

To implement HMP in Indonesia, CHAMPS and JNJ formed a long term cooperation. CHAMPS responsible to carry out all program component including developing annual proposal, training and program need assessment, technical and substantial preparation, conducting program: training, hospital administration laboratory, feedback and follow up survey, alumni gathering, hospital administration conference, and scientific hospital administration journal. JNJ APCC has been providing financial contribution and support without any marketing and promotion of any product of JNJ. Based on several discussion and feedback from some alumni, the factors that has been made this program sustainable are related to capable and reputable resource person, tailor made program, continuing communication, no sponsor promotion, and involvement of alumni/graduate of program as resource person of the program.

HMP has also been contribute to provide input and feedback to government policy in hospital administration as well as the impact of the implementation of Jaminan Kesehatan Nasional (Indonesia Medic Care) towards Universal Health Coverage in Indonesia by conducting several discussion and national scientific fora, and direct advocacy to key stakeholders at the Ministry of Health. Other beneficial of HMP is about providing input on the substances and methods of
teaching for the study program of Master Degree in Hospital Administration that is managed by Faculty of Public Health Universitas Indonesia.

Further challenges are ahead by HMP Program in Indonesia as sustainability of the program without any CSR fund, more attractive program packaging, and fulfilling the need of leadership and quality of hospital services ASEAN Economics Community.
Maternal mortality ratio in Indonesia remains high. National policy on village midwives distribution has been implemented, and percentage of births assisted by trained health personnel looks satisfied. Yet the question is in quality of maternal health care, in which it is contributed by adequate Information, Education and Counseling (IEC). Therefore, a study was conducted to describe the IEC as part of quality of maternal health care in health facilities in Indonesia.

To describe IEC in maternal health care facilities in Indonesia. In 2012, a cross-sectional study was done in randomly selected 10 provinces, covering 20 hospitals, 40 puskesmas and 40 midwife’s private practice. Each facility was visited by a team comprising of obsgyn, medical doctor, midwife and public health staff, who did observation and interview to facility’s staff, using pre-tested structure instrument, covering also non-clinical exploration, in addition to clinical aspects assessment. Scoring system was used to show the average level of quality of care of facilities.

In antenatal care, medical history assessment in hospital was weaker (47%) than puskesmas (61%) and midwife’s private practice (59%). Counseling and education in hospital was consistently low (33%) compared to puskesmas (67%) and midwife’s private practice (58%). From the patient’s perspective, waiting time was sufficient (85%), and facilities was clean (94%) and comfortable (62%) in all type of facilities. Hence clear information provided (28%) needs to be improved, in addition to good interpersonal interaction (49%). In normal natal care, improving documentation of clinical assessment in hospital and puskesmas calls for attention since the score was 50%, while midwife’s private practices could fully implement it. Hospital has to pay more attention to improve IEC component in maternal health care, in regard to support clinical services.
Impact Of A Total Smoking Ban At A Large Australian University

Sharyn Burns
Sharyn Burns; Jonine Jancey; Linda Portsmouth; Gemma Crawford; Jonathan Hallett
Curtin University
Australia
s.burns@curtin.edu.au

Despite substantial progress reducing smoking prevalence and exposure to second-hand smoke, tobacco smoking remains the largest contributor to and the most preventable cause of ill-health in Australia. Smoke-free laws have been found to assist in improving the health of non-smokers but may also impact the health of smokers by potentially reducing the amount of cigarettes smoked per day and increasing cessation. Support of smoke-free policy is an important aspect to successful implementation; arguments against smoke-free policy, usually generated by the tobacco industry, suggest that the public will not be supportive of smoke-free policy. Campus based studies in the US confer that while students are generally supportive of smoking bans in buildings, agreement about total campus bans is lower. In 2012 Curtin University implemented a total smoking ban on campus which includes all buildings, grounds and vehicles. The campus is large (116 hectare) with a high proportion of international students.

This paper will describe the impact of a total smoke free ban across campus using baseline and post one year data collected from staff and students. Random cross sectional online surveys were conducted prior to the implementation of the total ban and after one year of policy implementation. For both time periods a random sample of staff and students, aged 18 or over and studying or working on the main university campus were emailed via their university email address by the University Surveys Office to invite them to participate in the study. The sample at baseline (T1) was 968 and at post one year (T2) 662. The survey measured tobacco use, attitudes towards smoking and smoking restrictions and awareness and attitudes of campus smoking policy and was tested for reliability and validity prior to implementation. A two-tailed two-proportion z-test and independent sample t-tests were employed to determine statistical significance between the two time periods for categorical and continuous variables respectively.

Use of tobacco at the two time periods was similar although there was a moderately significant difference in respondents who had previously smoked with T2 respondents being more likely to categorise themselves as an ex-smoker (p <0.05). There was little change in attitudes towards smoking between T1 and T2. However a greater proportion of respondents suggested they would seek out smoke free environments at T2 compared to T1 (72.2% vs 67.4%; p <0.05). Respondents were significantly more likely to agree that the campus should be totally smoke free at T2 compared to T1 (71.4 vs 60.8; p <<0.001), this was true for non-smokers (p = 0<0.05) and ex-smokers (p< 0.001) however there was no statistical significance in responses for smokers between the two time periods (p = 0.8). There were some positive changes in attitudes towards smoke free bans between the two time periods. However at T2 while 92.8% of respondents felt the campus should be smoke free in all buildings at T2 only 64.8% felt the campus should be completely smoke-free. Like other studies a proportion of respondents in this study felt smokers should be able to smoke somewhere on campus. Daily exposure to second-hand cigarette smoke decreased significantly between T1 and
T2 with only 5.1% of respondents reporting daily exposure at T2 (compared to 17.3% at T1). However although a significant reduction only 33.2% of responded reported to have never been exposed to cigarette smoke at T2 which indicates second-hand smoke exposure remained unacceptably high.

Awareness of the policy increased over the two time periods indicating respondents were more aware that the policy existed and had changed to include a total campus ban. In addition specific restrictions associated with the policy were better understood. Agreement that smoking is not permitted anywhere on campus, including building, grounds and vehicles was significantly higher at T2 (65.9%) compared to T1 (8%) which reflects the change in the policy. Ex-smokers (71.9%) and smokers (69.1%) were more likely to be aware of the total ban than non-smokers at T2. Although agreement was high for all groups over one third of respondents were not aware of the total ban on smoking on campus.

Minimal changes to prevalence and attitudes towards smoking could be attributed to low levels of smoking and positive attitudes at baseline. While this study found some positive changes in attitudes towards the policy, levels of second-hand smoke and increased awareness of policy, the findings suggest there is still a need to promote and enforce the policy, especially among smokers. Although Australia has demonstrated positive changes in smoke free social norms and prevalence in the past three decades these data suggest there is still need for interventions targeting smokers. The policy was implemented with a minimal level of supportive strategies. Strategies specifically targeting smokers, and enhancing non-smokers awareness of the need for comprehensive policy, are important.
Impact Of Basic Sanitation For Healthy Behavior (PHBS) In Kutai Kartanegara District, Indonesia, 2013

Bambang Wispriyono
Bambang Wispriyono; Meliana Sari; Kamarudin
Center for Industrial and Environmental Health Studies (CIEHS), Faculty of Public Health, Universitas Indonesia
Indonesia
bwispri@ui.ac.id

Healthy behavior (PHBS) is an effort to create a healthy paradigm in the culture of individuals, families and communities. One important aspect of the effort is basic sanitation in community.

The aim of this study is to know the impact of basic sanitation to Healthy behavior in the community.

This study was done by using analytic survey methodology with cross sectional design. The populations in this study were householder in Kutai Kartanegara district. Total 1200 respondents have been including this study with sample random sampling technique. Bivariate data analysis using chi square test was continued logistic regression analysis.

The result showed that people with healthy behavior with good categories is 48.3% and 51.8% bad categories. A total of 73.6% of respondents have had good access to clean water, 36.1% had a good waste management, while each for excreta disposal facilities and good drainage respectively by 68.3% and 33.5%. In the bivariate analysis showed that all variable significantly correlated with healthy behavior (p <0.05). The results of logistic regression analysis showed variable waste management and drainage are the most influence variable for healthy behavior. As the conclusion, the impact of basic sanitation, especially solid waste management and drainage significantly influence to the condition of healthy behavior community.
Impact Of Physical Condition, Basic Sanitation And Residents Behavior For Healthy Homes Condition, Cilegon City, Indonesia, 2014

Meliana Sari  
Meliana Sari; Bambang Wispriyono; Kamarudin  
Center for Industrial and Environmental Health Studies (CIEHS) Faculty Of Public Health, Universitas Indonesia  
Indonesia  
meliana.sari21@ui.ac.id

Healthy home is a residential building that meets the health requirements that homes have latrines healthy, clean water facilities, landfills, wastewater disposal, good ventilation, appropriate density residential house and floor of the house that are not made from ground (MOH RI, 2003). Some of the factors that influence are physical condition of the home, basic sanitation and resident’s behavior.

The aim of this study was to determine the factors that most influence to healthy home condition in Cilegon city. This study was done by using analytic survey methodology with cross sectional design. The Population in this study were householders in Cilegon city with total 800 respondents including this study with sample random sampling technique. Bivariate analysis using chi square test was continued logistic regression.

The result showed that about 419 homes (52.4%) are healthy homes and 381 homes (47.6%) are unhealthy homes. Most of respondents in the age group of 36-45 years (36.1%), total of 76.8% of respondents own their home, 55.9% have a good water source, 42.3% doing well waste management, 82.3% and 56.% have a good excreta disposal facilities and drainage, and 67.1% have a good physical home condition (ceiling, lighting and flooring). Variables in residents behavior such as the presence of vectors in the homes, found the existence of larva and habit to washing hands are 95.9%, 15.1% and 54.5%. %. In the bivariate analysis showed that all variable have a significant correlation with healthy home (p <0.05) except for the presence of vector (p value = 0.093). Results of logistic regression analysis showed that variable waste management and hand washing habits are the most influence for healthy home condition. The conclusion of this study are improving waste management facilities and hygiene personal will increase the healthy homes in community.
Impact Of Workplace Exposure On Work Ability Among Food And Textile Industry Workers In Kuala Lumpur, Malaysia

Nursuhaili Mohd Amin
Nursuhaili Mohd Amin; Dr Marzuki Isahak; Prof Low Wah Yun; Dr Victor Hoe Chee Wai
UNIVERSITY MALAYA, MALAYSIA
Malaysia
nursuhaili.amin@gmail.com

Work ability is predicted by age and work-related psychosocial hazards; however, its association with other work environment factors has not been studied. Exposure to multiple hazards in the workplace environment may lead to reduced working ability.

This study aimed to determine the various socio-demography, occupational, musculoskeletal health status and working environment predictors of work ability. This is a cross sectional study among 500 food and textile industry workers in Kuala Lumpur Malaysia. The Standardised Nordic questionnaire (SNQ), work environment and work condition questionnaire and work ability index (WAI) questionnaire were utilized in the study. The higher the WAI score, the better work ability, ranged 7-49.

Mean age of the participants was 29.8 ± 8.79 years old with similar proportion of gender. Majority were Malay (63.4%), followed by Indian (20.0%), Chinese (15.8%) and others (0.8%). SNQ score shows higher mean ± standard deviation (SD) value for feet/ankle (1.92 ± 1.00), followed by lower back (1.66 ± 0.94) and shoulder (1.41 ± 0.76). Mean score of WAI was 38.86 ± 3.63. Most of the participants reported high exposure to slippery floor (68.6%), prolonged standing (68.0%) and moving object more than 20kg (54.8%). Multiple linear regression analysis found that poor lighting, moving objects more than 20kg, prolonged standing, low quality of life (physical, social and environmental domain) were found to be associated with work ability and this accounts for 16.6% of the variance.

Low work ability was associated with poor lighting, moving heavy objects, prolonged standing and low quality of life. Improvement of ergonomic work environment and self-perceived physical, social and environmental quality of life will improve work ability of the workers.
Impact Of Workplace Exposures On Worker's Quality Of Life In South East Asia

Isahak Marzuki  
Isahak Marzuki; Toai P Nguyen; Indri H Susilowati; Orawan Kaewboonchoo; Nursuhaili Mohd Amin, Low Wah Yun  
University of Malaya  
Malaysia  
drmarzuki@ummc.edu.my

Workplace environment is an important factor for safety and health of the workers especially in small and medium scale industries. The ultimate aim in the development of hazards control measures at the workplace is to maintain the quality of life of workers.

In this study, we aim to determine the various socio-demography, occupational and working environment predictors of quality of life.

This is a cross sectional study among 2098 food (50.8%) and textile (49.2%) industry workers in Malaysia, Thailand, Vietnam and Indonesia. The socio-demographic, work environment and work condition questionnaire and WHO Quality of Life - BREF questionnaire were utilized in the study. The outcome of quality of life was divided into 4 domain, which include physical, psychological, social and environment.

Mean age of the participants was 32.4 ± 10.2 years old with almost similar proportion of participants from each country. Majority of the participants were female (60.5%), married (54.8%) and at least having education up to secondary level (62.9%). Working in hot and humid environment (26.6%) reported to be the main hazard followed by repetitive movement (29.4%) and bending and twisting (24.3%). Poor environment quality of life was reported in 514 participants (24.7%). This followed by poor social (19.8%), psychological (10.6%) and physical (9.5%) quality of life. Indonesia has the highest percentage of poor quality of life, followed by Vietnam, Malaysia and Thailand. Multiple linear regression analysis found that exposure to noise, repetitive hand movement, standing work, exercise practice, type of accommodation and education level were found to be associated with environmental quality of life and this accounts for 17.0% of the variance.

Poor environmental quality of life was associated mainly with poor working condition. Improvement of work environment will improve the environmental quality of life of the workers in these four ASEAN countries.
Implementation Of Community Case Management Of Malaria, Diarrhea And Pneumonia For Children In Indonesia: Successes, Challenges And Preliminary Results

*Nasrin Kodim*

*Nasrin Kodim*
PRES FKM UI
Indonesia
pres.fkm@gmail.com

Indonesia has demonstrated a significant progress in reducing under-five mortality (UFMR). In the period of 1989-2000, UFMR has decreased on average of 7% annually from 97 to 46 per 1,000. This trend is recently slowing down starting from 91 deaths per 1,000 and is stagnating around 44 deaths per 1,000 live births. In connection with the achievement of MDG target in 2015 (30 per 1000), which was a reduction of 3% annual UFMR for period of 2000-2015, more serious measures need to be done because of more difficult causes of death.

To know the coverage of child survival intervention coverage in study and control area. This study was conducted in four locations of REACH project, included the district of Jayawijaya (Papua), Buru (Maluku), Timor Tengah Selatan (Nusa Tenggara Timur), and Brebes (Jawa Tengah). Those districts were currently in the lowest-quintile within each respective province.

In all districts, there is a wide gap between children who suffered from the diseases, sought care and who received recommended treatment for pneumonia, malaria and diarrhea, the widest is in Jayawijaya and the narrowest in Brebes. Local concept of pneumonia, diare and malaria was different in each village. Most of people life in unhealthy house. Mothers and the children slept on the top part of the house which lack of ventilation, using wood burning as heater for 24 hours.
Implementation Of Nutrition Post For Reducing Underweight Children Using Positive Deviance Approach: A Qualitative Study

Asih Setiarini
Asih Setiarini; Diah M Utari; Siti Arifah Pujaartini
Universitas Indonesia
Indonesia
asih.setiarini@gmail.com

Underweight children is still remains a nutrition problem in some part of Indonesia. Currently, some districts collaborate with private sector develop intervention in order to reduce it using positive deviance approach.

The objective of the study was to explore the implementation of nutrition post for reducing underweight children using positive deviance (PD) approach.

A qualitative study was conducted in May 2012 in five villages in Berau District of East Kalimantan province. Twenty seven focus group discussions (FGDs) and 12 in-depth interviews were carried out involving mothers who has underweight children, fathers who has underweight children, cadres, religious community leaders, midwife or nurse and head of the village. The guidelines for FGDs and in-depth interviews included the topics of community empowerment, behavior changes, local capacity. Descriptive analysis will be used to describe selected indicators. All qualitative data (focus group and ID) that recorded will be transcribed (move information from sound into the written form). The result data from transcribe will be cleaned by re-check the suitability between transcribes with content of tape in order to make the data accurate. For data analysis use theme analysis which is the process of encoding information, which can generate a list of themes or indicators that often arise. The use of thematic analysis allows researchers found a "pattern" of all information obtained.

The results of the study showed that not all village officials, village leaders, health workers and volunteers understand the concept of PD, they did not know the nutritional problem in their village thus its make difficult to move people and bring change. On the implementation of the nutrition post, it showed that not all mothers know the reason for participation in nutrition post, food contribution has not been going well, the role of cadres were not maximized (cooking and cleaning activities are generally carried cadres, not all hold the nutritional counseling), the role of mothers were not maximized (shopping, cooking, cleaning) and most of the nutritional posts were not monitored well by village officials, leaders and health workers.
Improving Validity And Reliability Of Occupational Exposure Data Through Different Approach Of Expert Judgment

Nurhayati Prihartono
Nurhayati Prihartono, Sc.D, M.Sc., MPH, DDS
Department of Epidemiology Faculty of Public Health Universitas Indonesia
Indonesia
nungkip@yahoo.com

The use of different approaches of expert judgment to estimate the risk of disease associated with occupational pesticide exposures may improve the validity and reliability of exposure data.

The present study aims to compare occupational pesticides exposures determined by experts independently, by concordance level of exposure among experts, and by consensus in examining the risk of aplastic anemia among workers. Three experts assign the levels of exposure of 4 major pesticides for each 476 job titles that were derived from a case-control study of aplastic anemia in Thailand. Two thousands seven hundred seventy eight subjects were included in the study. A standardized instrument was developed based upon exposure probability, frequency, intensity, and confidence rating. We compare risk estimates and its confidence intervals obtained by the three approaches, and examine factors associated with consensus rating.

The estimated risks associated with pesticides were similar when pesticides were assigned independently or within concordance levels of exposure between experts. The results were not consistent for pyrethrins. The risks increased within the subgroup in which exposure was assigned with high confidence: OR (and 95% CI) for organophosphate was 2.23 (1.59-3.12), paraquat was 2.26 (1.60-3.19), and carbamate was 2.04 (1.46-2.85). The risks were weak when determined by consensus: ORs for organophosphate, paraquat, and carbamate were 1.81, 1.71 and 1.61, respectively. There was little improvement in reliability of risk estimates when exposure obtained independently or assessed by consensus. The study provides important findings about different approaches in obtaining exposure data. This approach should be further developed to study occupational risks in developing countries.
Indonesia Nha Update 2013

Kurnia Sari
Kurnia Sari; Prastuti Soewondo; Mardiati Nadjib; Yunita; Donald Pardede; Kalsum Komaryani; Lili Nur Indahsari; Amilia Wulandhani
Center for Health Economics and Policy Studies, Faculty of Public Health Universitas Indonesia, Ministry of Health Government of Indonesia

Indonesia
kurniasari.phui@gmail.com

National Health Accounts (NHA) have been acknowledged as important financing data for policy making in health sector. The Indonesia NHA Team has been producing annual estimate of Indonesia NHA.

To present the Indonesia NHA Update of 2013 as a baseline for health financing reform in Indonesia various methods have been used to estimate NHA. For this 2013 estimate, some improvements have been recorded in term of depth of data details, particularly on ministries spending on health. The ministries data was collected from ministry of health and ministry of finance. While private spending was estimated from Central Board of Statistics data that was already been analysed for this purpose, surveys, and various secondary data.

At this moment, the consolidated figure of NHA is in the process of production, and it is expected to have a result within few weeks. The planned results to be presented will be the source of health financing, where the money for health is spending (by providers), and for what health function is the money spent for. The comparison with other countries, the trends in health financing, and other indicators will also be presented.
The severe acute respiratory infection (SARI) surveillance system, called SIBI, provides critical information on the circulation and magnitude of influenza, but the question remains about optimizing the utility of this system in the broader Global Health Security Agenda (GHSA) context.

Surveilans ISPA Berat Indonesia (SIBI) is assessed for its utility and broader flexibility for the detection of other emerging infectious diseases (EIDs). Utility was assessed by determining whether the system outputs were able to answer stated objectives. Flexibility was assessed by determining if the systems data collection and analyses could be adjusted to answer other EID objectives.

SIBI has very good utility as it addresses all of its stated objectives. In May 2013 April 2015, 1,806 SARI cases were reported of which 94% (n=1,697) has specimens tested for influenza virus. Of those tested, 12% (n=200) were positive. Detailed clinical and epidemiological findings for both SARI and influenza cases are reported in the monthly bulletin.

SIBI had surprising flexibility as it could rapidly integrate surveillance for emerging influenza virus strain A/H7N9 and for Middle-East Respiratory Syndrome Coronavirus by adjustment of case data collection and the laboratory testing algorithm. Since the adjustments were made, 21 MERS CoV suspects have been found and tested through the system but none were positive. A complementary arbovirus surveillance system at the same SIBI sites was established and utilizes common resources to maximize cost efficiency.

As a platform, SIBI plays an important role in addressing the current objectives for influenza surveillance and it has high flexibility for addressing other disease surveillance requirements. SIBI has demonstrated good innovations for addressing emerging disease surveillance priorities for EIDs and disease research questions.
Influence Of Selected Factors On Prevalence Of Microvascular Complications
Among Type 2 Diabetes Mellitus Patients Attending Diabetic Centre,
Northern Srilanka

R.Surenthirakumaran
R.Surenthirakumaran; T.Veerasuthen; S.Sivansuthan; T.Kumanan
Faculty of Medicine, University of Jaffna
Sri Lanka
surenthirakumaran@gmail.com

Prevalence, morbidity and mortality of diabetic patients have been increased over the year in all
over the world and Sri Lanka. Sri Lankan study about the micro and macro-vascular complication
found that the duration of diabetes and control of diabetes were associated with the occurrence of
micro and macro vascular complications. Published data is not available about the prevalence,
morbidity and mortality of diabetes in Northern part of Sri Lanka.

This study is planned to assess the prevalence of the micro-vascular complications and the influence
do disease related factors such duration of disease and co-morbidities and socio-demographic
factors. Descriptive institutional based cross sectional study was carried out at Diabetic centre,
Teaching Hospital, Jaffna which is providing special care for diabetic patients who referred from
other clinics for annual review of the diabetic care. The actual sample size was 352. Interviewer
administered questionnaire was used to collect the data from the study participants. Data analysis
was done with the help of Statistical Package for Social Science (SPSS). Monovariate analysis was
done and was presented in percentages in tables and charts. Bivariate analysis were done to see the
influence of sociodemographic and economic factors on treatment adherence. Chi-square statistical
tests was carried out to see the significance. Ethical clearance was obtained from the Ethical Review
Committee, Faculty of Medicine, University of Jaffna.

Majority of the participants 228 (65.5%) were male. Mean age of the participants was 60.3 (Sd=10.3) and age range was from 31 years to 93 years.
Most of the patient 166 (47.7%) had the primary level education. Majority of the patient 324
(93.1%) were following the clinic regularly. Most of the patients 115 (33.0%) were living less than 5
km distance to the clinic. Few patients are coming from far way places. Distribution of distance to
clinic is right skewed and median was 8.0 kms. Distance to clinic range was from 1km to 112 kms.
Duration of the disease was not known for only 27 (7.8%) patients. The distribution of duration of
diabetic disease was right skewed and median was 8.6 years. Range of the duration was from 1 year
to 44 years. Majority of the diabetic patients 203 (58.3%) were having hypertension. Following to
that, 73 (21%) had the IHD. Only 41 (11.8%) of the diabetic patients were obese.Majority of the
diabetic patients had nephropathy 192 (55.2%). Only 54 (15.5%) and 44 (12.6%) were had the
neuropathy and retinopathy respectively. Various international studies on prevalence of type 2
diabetes complications showed that 15-48 % of the diabetic patients develop retinopathy, 11-
25%angina and /or myocardial infarction, 20-40% stroke, 25-60% peripheral neuropathy. More over
50-75% of long term type 2 diabetes patients had hypertension and almost 75% of the type 2 had
the dyslipidemia. Neuropathic complication was lower when compare with the reported national
and international percentages. Assessment of neuropathic complication need more accuracy
method. All the diabetic complications are significantly associated with the duration of diabetes.
Only retinopathy is associate with the regularity to clinic.
Influencing Factors For The Sputum Culture Conversion Among MDR Pulmonary TB Patients (2011-2014) In Labuang Baji General Hospital, Makassar City

Ikes Dwiastuti
Ikes Dwiastuti; Nurhayati A. Prihartono; Mondastri Korib Sudaryo; Sulistyo
Universitas Indonesia
Indonesia
ikes_horcrux@yahoo.co.id

One of the new emerging challenges in TB controlling is multidrug resistant tuberculosis (MDR TB). MDR TB is a type of TB resistant caused by the unresponsiveness (resistancy) of Mycobacterium tuberculosis to at least isoniazid and rifampicin in which both are the most effective anti-TB drugs in first line. The treatments of MDR TB were actually more challenging than finishing the treatment of first line TB. The first and the advanced phase of MDR TB treatment took 18 months after culture conversion. The status of microbacteria culture commonly used as guidance to the treatment and considered as one of the MDR TB treatment's result predictor.

This study was aimed to determine the influencing factors for the timing of sputum culture conversion among MDR pulmonary TB patients. This study was conducted in Labuang Baji General Hospital, Makassar City started from April 2015 to June 2015. Cohort-retrospective design was performed in this study. There were 183 patients involved in this study consisted of 139 (76.0%) patients with sputum culture conversion, 4 (2.2%) patients with no sputum culture conversion, and 40 (21.8%) patients were loss to follow up. The research data were analyzed using survival analysis method.

The results of the conducted study showed that, the probability of sputum culture conversion in MDR Pulmonary TB patients were about 95.52% with an average time of 68 days of treatment. The multivariate analysis showed the interruption to the treatment (HR:0.45; 95%CI: 0.26-0.79) was affected the sputum culture conversion. Patients that have done treatment interruption will lose a few dosage of medicine that should be consumed, so the efficacy of the medicine regimen, since the interruption, will not be sufficient enough to oppose the Mycobacterium Tuberculosis that already resisted to the medicine, and slowed down the sputum culture conversions. Diabetes Mellitus (DM) status also affected the sputum culture conversion namely, DM status before 33 days (HR:0.75; 95%CI: 0.29-1.95), and the DM status after 33 days (HR:1.95; 95%CI: 0.90-7.60). Before reaching 33 days, the negative effect of diabetes mellitus to TB treatments caused by immunology disfunctions, which is a shift in chemoattractant’s monosit, alveolar macrofag activity and a type I cytokines phenotype. Consequently, the loads of micro bacteria are higher on diabetes mellitus patients, which will cause tardiness in sputum culture conversion which affected the success of the treatment. While for the MDR Pulmonary TB patients with DM that last more than 33 days, the glucose level are relatively under control. Blood viscosity that usually occur were not detected in this case and the blood flow became relatively swift, so the drugs absorbtion and the conversion of sputum culture were also faster. The medical treatment’s history also affected the conversion of sputum culture. Patients that already treated with first line OAT (HR:0.32; 95%CI: 0.12-0.90) and patients that
already had a second line OAT treatment (HR: 0.27; 95%CI: 0.10-0.77) are influencing the sputum culture conversion. Patients that already had a TB treatment history tends to have a higher positive level of sputum caused by the unfinished previous treatments. The massive amount of these bacteria caused the bacterium-fagocyting process harder for the macrofag, so the conversion of sputum culture will take a longer time and the risk of medication failure become higher. Intensive and holistic treatments are needed for the MDR Pulmonary TB case, by paying attention to the medical interruption, DM status, and the history of previous treatments.
Innovation On Development, Reliability And Validity Test Of Digital Infant Length Measurer With Sonar Sensor Precision

Syafiq A
Syafiq A; Fikawati S
Universitas Indonesia
Indonesia
a-syafiq@ui.ac.id

Length measurement was usually conducted using instrument that was not very accurate, bulky, and impractical. There is a need to develop an instrument to measure length more accurate and more precise to minimize measurement error.

This study was aimed at developing digital length measurer employing sonar sensor (P2B2D Version 1.0) by considering accuracy and precision of length measurement, portability, and comfort of infant during measurement. Other aim of the study was to conduct reliability and validity test of the instrument.

Three sonar sensors were applied to detect if crown of the head, calf, and heel have been positioned properly. Those sensors will activate led light on the digital display panel of the instrument when touched. Thus, measurement could only be made after all lights were on. Intra-method reliability test was conducted through inter-examiner reliability test involving three examiners. Inter-method reliability was tested by comparing result of P2B2D to results of other instruments (wood and mica lengthboards). This study involved 53 infants measured by three examiners. Reliability and validity coefficients were produced using Pearson correlation method. Analyses were also conducted to measure examiner's precision and accuracy and error variability or error margin in anthropometry by calculating Technical Error of Measurement (TEM).

The reliability coefficients of P2B2D calculated by different methods ranged from 0.747 (inter-method reliability against mica length-board using TEM analysis) to 0.966 (inter-method reliability against wood length-board using Pearson correlation analysis). The corresponding validity coefficients were 0.864 and 0.963, respectively.

Those coefficients indicated that P2B2D Version 1.0 reliability and validity could be considered as substantial to excellent. It is recommended to improve this instrument by minimizing possible source of error related to decreasing accuracy due to Doppler effect, for example by experimenting different types of sensor.
Institutional Factors Constraining The Indonesia Family Planning Program Performance

Budi Utomo

Budi Utomo
Department of Population and Biostatistics, Faculty of Public Health Universitas Indonesia Indonesia
budi.utomo.ui@gmail.com

The Indonesia family planning program performed well from early 1970s till early 2000s by bringing up contraceptive use from 5% to more than 50%, and bringing down the total fertility rate from 5.0 to 2.3. Since then, however, the program has degraded along with reduced international and national social and political supports. During the past and half decade the contraceptive use and fertility rates have been stagnant at around 60% and 2.6 respectively. Studies indicated that the changing pattern of contraceptive use from IUD dominated in the past to Injection and Pill dominated at present reflects more reduced program quality rather than the clients' need of contraceptive method.

A study was conducted to identify strategic institutional factors which constrain the Indonesia family planning program performance.

Conceptually, institutional factors are program supply factors including coordination and integration between related family planning program related sectors. Data were collected through a review of related documents and literatures coupled with interviews with related family planning program stakeholders.

The study identified institutional and discussed alternative solutions to address such constraints, which included lack of socio-political supports; confused roles and lack of integration between related sectors; weak district/ city capacity; and weak infrastructure of family planning services. Family planning messages should be revised toward improved family health rather than family size limitation to invite local governments and community supports. Clear regulations and instructions should be developed to complement roles and functions of different related sectors, including private sectors.
Jakarta Menteng Park Optimization Function Through Environmental Education For Biodiversity Conservation And Environmental Health

_Suyud Warno Utomo_
_Suyud Warno Utomo; Swa Abdas Ria Rahayu; Haryoto Kusnoputranato_
Faculty of Public Health Universitas Indonesia

Indonesia
sw_utomo@yahoo.com

The growth of the city that continues to rise will lead to diminishing green space area even less than 30 %. Menteng City Park is one of the green space located in central Jakarta, that has a social and ecological function. Social function of Menteng City Park can still be optimized existence. Menteng City Park can serve as a means of educating the public or visitors in the city park. Increased knowledge of the vegetation is expected to encourage visitors to participate in maintaining and preserving biodiversity. Sustainable environmental hygiene, water absorption function properly can improve environmental health

The study aims to analyze the educational function of the city park. The research method is done by observation. Research carried out by field observations and look for any information given in Taman Menteng City. For the vegetation is there any information on the type of plants, plant functions, status of the plant, origin and others. Is there also a ban on damaging the park including the existing vegetation. Sanitary facilities including visitor garbage, clean water and so forth. The results showed that the presence information Menteng Park City is still very minimal. Information given is just a plant name park facilities. Meanwhile visitors to Parks Menteng quite varied from children to adults. Information is not just the type of plant, but can be developed, for example: function for medicinal plants, shade, absorbing air pollution, bird habitat and so forth. This information is expected to provide more knowledge for visitors especially children. It is hoped they can better understand the function of the park so much affection even frequent visits or even develop elsewhere. Most visitors come with the purpose of recreation and sport. Means that the more visitors will increasingly healthy society through sports. It required additional information boards relating to the role or function of existing plants.

Waste handling visitors already provided the place with color separation for plastic waste, leaf litter and food waste has been distinguished. Minimum possible pavement as much as possible in order to serve the absorption of rainwater. Garbage is often found not be disposed in place. Need appeal even sanctions. State Parks Menteng increasingly clean, green, complete information to increase knowledge of the visitors. The results showed that the presence information Menteng Park City is still very minimal. Information given is just a plant name and park facilities. Meanwhile visitors to Parks Menteng quite varied from children to adults. Information is not just the type of plant, but can be developed, for example: function for medicinal plants, shade, absorbing air pollution, bird habitat and so forth. This information is expected to provide more knowledge for visitors especially children. It is hoped they can better understand the function of the park so much affection even frequent visits or even develop elsewhere. Most visitors come with the purpose of recreation and sport. Means that the more visitors will increasingly healthy society through sports. It required additional information boards relating to the role or function of existing plants.
Job Satisfaction Analysis Of The Staffs At Hospital Xyz In Indonesia, 2015

Vetty Yulianty Permanasari
Vetty Yulianty Permanasari; Hananto Andriantoro, Novita Dwi Istanti, Tresnasari Satya Putri, Ira Gustina
Faculty of Public Health, Universitas Indonesia
Indonesia
vetty.yulianty@yahoo.com

Topics related to job satisfaction is very relevant and of interest to public health practitioners due to the fact that the organization and employee's well-being leads to job satisfaction. Evidence from several studies showed a correlation between job satisfaction and specific productivity. Job dissatisfaction can lead to higher staff turnover, absenteeism, delays and complaints. In health care, there is a definite relationship between the satisfactions of the hospital staffs with patients satisfaction. If the staffs are not satisfied, even though they are working hard, it is difficult for them to hide his discontent when interacting with patients or other staffs. The main reason to evaluate job satisfaction of hospital staff is to identify the problem and try to solve it before giving impact on patient care and treatment. In addition, it is a critical component in creating qualified professionals in the field of health care services.

This study aims to identify factors associated with staff job satisfaction of "X" Type-A Hospital in Jakarta, know the dominant factor, and provide recommendations to improve the staff job satisfaction of this hospital. Furthermore, it will then help in increasing staff job satisfaction, which then reduce the staff turnover, training costs, absenteeism, identify opportunities for cost savings, evaluate issues related to patient care, identify the required training, can compared with other hospital staff job satisfaction which were similar in hospital type, as well as improving the reputation of this hospital because of having qualified staffs.

It is a quantitavie study with a cross sectional study design conducted in July-August 2015. Total population is 1750 staffs, then from the sample size calculation this study was surveying 326 staffs. This study used univariate, bivariate and multivariate analysis.

Most of the repondents are women (63%), with age of 35-50 years old (44%), married (90%), medical staffs (60%), government employees (90%), have higher education degree/university graduate (90%), period of working in the hospital is more than 10 years (70%), gaining annual revenue before tax which is under Rp250 millions (96%).

The level of job satisfaction is 71%. Based on the univariate analysis, the factors that still need much improvement (from the lowest mean score up to the higher one) is on career development, compensation and benefit, relationship with the hospital management, education and training, and supervision. The factors significantly associated with the staff job satisfaction are: type of work, job security, working environment, career development, relationship with hospital management, and compensation and benefits. The dominant factor associated with the staff job satisfaction is the type of work which contribute 40% to the satisfaction. It means that if the management put "the right man on the right place" so it will lead to the higher level of staff job satisfaction.
Knowledge And Health Seeking Behavior Among Care Givers Of Children With Developmental Delay In Jaffna District Of Northern Sri Lanka

R.Surenthirakumaran
V.Elankumaran; S.MaryRoxiya; R.Surenthirakumaran; M.G.Sathiadas
Faculty of Medicine, University of Jaffna
Sri Lanka
surenthirakumaran@gmail.com

The term Developmental delay implies slow acquisition of all skill fields (gross motor, vision & fine motor, hearing & speech, language & cognition, social/emotional & cognition. The health seeking behavior of house based caregivers of children with developmental delay, knowledge of caregivers on condition/disease of the child, available health care services and the proper care needed to the child and the influence of knowledge factors in health seeking behavior were assessed by this study.

To assess the health seeking behaviour of caregivers of children with developmental delay and influence of knowledge of care givers on disease, care and health care services.

Descriptive cross sectional community based design was used. Well constructed interviewer administrated questionnaire was used to collect data. It was carried out in randomly selected 4 Divisional Secretariate divisions in Jaffna district. Available disability children were 193. All were included. Data were entered by the researchers in their personal password protected computer and data analysis was done with the help of SPSS 21(statistical package for social sciences) computer software. Charts and tables were utilized for data analysis appropriately. Health seeking behavior was assessed by questions and it was analyzed by responses of care giver. According to that, results were expressed as percentage. Knowledge was assessed by some question for each variables then it was analyzed by responses of each care giver to this questionnaire. According to that, results were expressed as percentage. Chi-square test was applied to find out the significance wherever applicable. P value less than 0.05 was considered as significant.

193 caregivers were selected for this study and the responders were 144 (74.6%) When analyzing caregivers demographic distribution, out of 144 subjects, the mean age of care givers was 42.4 years(SD=10.38). About 23(16%) caregivers were male and 121(84%) were female. Female caregivers are very high in number. Based on the educational level of the caregivers, the mean educational level was grade 8.1(SD=3.51). Among these children, mean age was 11.19 years (SD= 4.08).48(20.17%) of children have delay in gross motor, 61(25.63%) of children have delay in fine motor, 55(23.11%) of the children have delay in hearing & language and 74(31.09%) of the children have delay in social and emotional developments. The overall health seeking behavior was good in 21(14.6%), average in 59(41.0%), and poor in majority 64(44.4%) of care givers. The knowledge regarding disability was good in 7(4.69%) of care givers, average in average 60(41.7%), and poor in majority,77(53.5%) of care givers. The knowledge of caregivers regarding their children disability has significant effect on their health seeking behavior.(p=0.008), effect of knowledge of care givers regarding available services significantly affect their health seeking behavior(p=<0.001) and effect of knowledge of care givers on care giving doesnt correlate with their health seeking behaviour (p=0.14). Health seeking behavior is low among the house based care givers of developmentally delayed children, and the overall knowledge of care givers in the aspects of knowledge on disability of their children, care for the children and on available health care services, significantly reduces their health seeking behavior (p=<0.001).
Knowledge Of Contraceptive Method For Limiting As Contributing Factor For Contraceptive Method Switching In East Java And West Nusatenggara

Iwan Ariawan
Iwan Ariawan; Rita Damayanti; Christiana Titaley
Department of Biostatistics. School of Public Health, Universitas Indonesia.
Indonesia
ariawan@dnet.net.id

Using appropriate method of contraceptive can help families in reaching their reproductive goal. Many women switched their contraceptive method due to lack of knowledge, side effects, availability of contraceptive method and other reasons. Switching among contraceptive method is the primary determinant of the prevalence of specific contraceptive use and it has implication to the fertility rate in that region. Switching from a short acting to long acting method is encouraged for women who want to limit their fertility. A better understanding of knowledge as one of contributing factors for women to switch between short acting to long acting method and vice versa is needed, to help inform the program manager and policy maker to encouraging consistent and effective use of contraceptive method.

To assess the importance of Knowledge of contraceptive method for contraceptive method switching from short acting to long acting and permanent method contraceptive method switching from short acting to long acting and permanent method contraceptive method switching from short acting to long acting and permanent method.

This analysis used data from baseline survey for Improving Contraceptive Mix Method that has been conducted in East Java Province and East Nusa Tenggara by the Center for Health Research, Universitas Indonesia in collaboration with Center for Communication Program of Johns Hopkins University (JHU-CCP), Ministry of Health and National Population and Family Planning Board. Total sample size is 13,161 married women aged 15-49 years with 6,057 women in East Java and 7,104 women in West Nusatenggara.

Contraceptive method switching variable in the last 10 years were constructed from history of contraceptive use and grouped as no switching, switched from short acting to long acting and permanent method, and switched from long acting and permanent method to short acting method. Socio-demographic and knowledge variable were treated as determinant variable.

Chi-square in contingency table and multiple logistic regressions was used to assess the determinant variables. The non-switching group was treated as comparison group in the logistic regression analysis. All analysis was done in Stata 13 with consideration of complex sample design of the survey. All statistical tests were done at 5% significance level and adjusted odd ratios were reported with their 95% confidence interval.

There is a total of 2,576 married women age 15-49 years in East Java and 2,222 in West Nusatenggara who has used contraception in the last 10 years and still using it at the time of interview. About 83% of women who used short acting method are still using the method in the last 10 years and this pattern is similar in East Java and West Nusatenggara. Among women who used
long acting method, about 40% changed to short acting method in the last years, with a small differences between the two provinces, 43% in East Java and 38% in West Nusatenggara. A multiple multinomial logistic regression with province, welfare quintile, general knowledge of contraceptive method, knowledge of contraceptive method for limiting found welfare quintile and knowledge of contraceptive method for limiting as contributing factors for method switching from short acting to long acting method. Women in higher welfare quintile are more likely to switch from short acting to long acting method, compared to women in lower welfare quintile. Women with higher knowledge in contraceptive method for limiting are also more likely to switch from short acting to long acting method (odds ratio: 5.5, 95%CI: 4.2-7.1), compared to women with lower knowledge. Welfare quintile is not a contributing factor for method switching from long acting to short acting method.

These results demonstrate the importance of women's knowledge of contraceptive method for limiting for switching from short acting to long acting contraceptive method. Therefore, improving women knowledge on long acting method will increase the use of long acting and permanent method. This finding shows the importance of education of family planning method, either through community based education program, mass media or counseling to raise women and their family awareness about appropriate contraceptive method.
Knowledge, Attitude And Practice Of Dengue Fever In A Rural Community In Malaysia: A Cross-Sectional Study

Da Wei Liew
Da Wei Liew; Kwok Chin Chong; Leong Hooi Tan; Jiat Earn Wong; Kee Ying Yeoh
University of Malaya
Malaysia
c74171992@gmail.com

Dengue fever is endemic in Malaysia and we are ranked third by World Health Organization among countries in the Western Pacific Region in terms of the number of reported cases in the period of 1991 to 2007. As of July 2015, the number of dengue cases reported were one third higher than the total cases reported for the same duration in 2014. There was also almost double the mortalities compared to 2014. In view of the seriousness of this problem, there is a need to reevaluate the publics knowledge, attitude and practice in preventing dengue fever. Therefore, we initiated a survey on this topic among the community in Port Klang, Selangor, Malaysia.

To determine the levels of knowledge, attitude and practice as well as to study the possible factors associated with knowledge and practice in the prevention of dengue fever among the community in Port Klang.

This was a cross sectional study carried out in July 2015. The study was conducted through face-to-face interviews using interviewer-administered questionnaires. Opportunistic sampling was used to recruit the participants from both Port Klang District Health Office and Port Klang District Clinic. Informed verbal consent was obtained from participants before the survey was conducted. Data collected included socio-demographic characteristics, knowledge, attitude and practice in the prevention of dengue fever. The scores of knowledge, attitude and practice were summed up and the median scores of each section were used as the cut-off point to differentiate between good or poor knowledge, attitude and practice. Data was entered and analysed using SPSS for Windows. Multiple logistic regression analysis was used to identify determinants of knowledge and practice of dengue fever prevention.

A total of 207 participants were recruited in this study. There were equal proportions of male to female participants. More than half of them were Malays, had at least secondary education and were in the age group of 25 to 54 years. About 14% of them had experienced dengue fever personally while 30% of them had experience with family members having dengue fever. In the univariate analysis, knowledge score was positively associated with age group between 25 to 54 years old (OR = 5.81; 95% CI : 1.75, 19.24); higher education levels (secondary education: 5.78; 2.65,12.61; tertiary education: 18.5; 6.16, 55.57) and good attitude (2.44; 1.2 8, 4.64). Practice score was positively associated with age group of 25 to 54 years old (3.21; 1.0 8, 9.56) ; availability of health campaigns (2.97; 1.54, 5.73) and higher attitude score (2.55; 1.32, 4.94). In the multivariate analysis, knowledge score was only associated with education levels (secondary education: 7.51; 2.82, 20.00; tertiary education: 18.47; 5.09, 67.03); while individual experience with dengue fever (3.67; 1.03, 13.10), availability of dengue related health campaigns (3.14; 1.46, 6.74) and good attitude score (2.36; 1.06; 5.27) were positively associated with practice score. In summary, participants who had at least secondary education had better knowledge regarding dengue fever.
while those with previous personal experience on dengue fever, had dengue related health campaigns within the vicinity of their household areas and those with better attitude scores were more likely to practice good dengue preventive measures. Our findings showed knowledge did not influence practice while attitude was positively associated with practice. Health campaign should be planned towards changing the attitude of the public in dengue related preventive measures.
Leptospiral Infections In Urban And Rural Rats In Perak, Malaysia And Its Public Health Implications

Muniandy Narasiman  
Muniandy Narasiman; Banusanthar Lohanathan; Evie Khoo  
Universiti Kuala Lumpur-Royal College of Medicine Perak  
Malaysia  
muniandy@unikl.edu.my

Leptospirosis is a re-emerging zoonotic disease, caused by Leptospira interrogans. Leptospira are naturally carried in the renal tubules of rodents, wild and domestic animals. Rats can spread the disease to human, directly, through handling of animals, through contact with rodent faeces, urine or saliva, or through rodent bites or indirectly through ticks, mites or fleas that have fed on infected rodents. Rats can also spread diseases to animals in farms, homes and the outdoors. An increasing number of outbreaks of leptospirosis have been reported over the past decade in Malaysia. Although leptospirosis is a notifiable disease in Malaysia, in 2011 and 2012, the reported cases stood at 2,268 with 55 deaths and 3,665 with 48 deaths, respectively. A total of 2,925 cases with 28 deaths have been reported in 2013. A total 753 suspected cases of leptospirosis have been detected in flood-hit states in Malaysia with 126 people confirmed to be suffering from the disease in 2015. An upsurge in leptospirosis has been recently reported amongst travellers and those associated with water recreational activities in Malaysia. Pathogenic Leptospira have been detected in wild rats from selected environments. Many recent deaths due to leptospiral infections in Recreational Water Spots (RWS) and National Service Training Camps (NSTC) in Kedah, Perak, Pahang, Kelantan and Sarawak have been reported. The aims of this study were to determine if rats in urban areas in Ipoh harbour pathogenic bacteria and to determine if pathogenic serovars are still circulating in NSTC and RWS in Perak.

A total of 95 urban rats were trapped between February to October 2014 from alleys behind wet markets and restaurants in Ipoh, Malaysia using baited wire traps. Similarly, 80 rats were captured from February to September 2015 from NSTC and RWS throughout Perak. Fifty environmental water and soil samples were collected from stagnant ponds in the vicinity of NSTC and RWS. The rodents were dissected and blood samples were collected through cardiac puncture. Kidney, blood samples and filtered water samples were inoculated into either a liquid or semi-solid EMJH medium supplemented with 200g/ml 5-fluorouracil. Bladder samples from rats with reminiscent urine were also inoculated into EMJH medium for Leptospira growth.

The inoculated media were incubated aerobically at 30oC for Leptospira culture and were examined under a dark field microscope for the presence of Leptospira at weekly intervals for a period of three months. Leptospira species were identified by microscopic agglutination test. Polymerase chain reaction (PCR) was used to confirm the isolated strains using G1/G2 primers for identification of Leptospira. The sets of primers used was from 16s rRNA and LipL32 genes. The cultured Leptospira in EMJH medium was harvested and DNA was extracted using Wizard Genomic DNA Purification Kit (Promega, USA) according to the manufacturer's instructions.
PCR was carried out using Red Mix Master solution (Bioline, UK). The PCR master mix contained 25µl of Bioline Red Mix 2X, 1.25µl of Genus Specific Forward Primer, 1.25µl Genus Specific Reverse Primer and 15µl of RNase free water. The final PCR tube consisted of 45µl of PCR master mix and 5µl of DNA template. For negative control, 5µl of distilled water was used instead of the DNA template and purified DNA from the stock culture of L. australis was used as a positive control. The PCR was performed on a Nexus Gradient PCR thermocycler (Eppendorf, Germany). The initial denaturation was at 95 C for 5 min, followed by 35 cycles of denaturation (94 C for 60s), amplification (55 C for 60s), extension (72 C for 90s) and final extension at 72 C for 10 min and then held at 4 C. One µl of each reaction of the amplified PCR products were electrophoresed on a 1.2% agarose gel with 1000bp ladder for 30min at 100V.

A total of 95 rats belonging to three species namely Rattus norvegicus, Rattus diardii and Rattus exulans were examined from urban areas. Leptospira species was not detected by culture or PCR in blood, kidney and urine samples of all urban rats examined indicating that they were apparently healthy. However, preliminary results showed Leptospira positive culture was seen in dark field microscopy in 11 out of 35 water samples and 4 out of 15 soil samples collected in the vicinity of NSTC areas. The overall prevalence of 30 % positive culture of Leptospira in filtered water and soil samples is of concern and merits further investigations. Confirmatory PCR tests using 16S rRNA gene and LipL32 gene as primers is being performed. As rats are the major reservoirs of Leptospira causing leptospirosis in humans, establishing rodent control programs is one of the essential components in prevention and control of this disease. The State Health Departments have compiled a database for leptospirosis occurrences based on three types of surveillance which are hospital-based surveillance, laboratory based sero-surveillance and active surveillance under the Prevention and Control of Communicable Diseases Act 1988 since 2010 Malaysia. Though there is a concerted annual effort going on to control the urban rat population, such an effort is not apparent for rural areas where leptospirosis cases occur frequently. The uncontrollable huge population of rats in central market and alleys behind restaurants in Ipoh city is always a threat to public health. The local government and other relevant authorities should pay more attention to the dangers of an expanding rat population. Thus, continuous monitoring and pest control by local authorities is very necessary to avoid the reemergence of the disease in both urban and rural areas.
Life Cycle Assessment Of Household Toxic And Hazardous Waste Management (HTHWM) Options For Semarang City, Indonesia

Elanda Fikri
Elanda Fikri; Pujiono; Purwanto; Henna Rya Sunoko
State Health Polytechnic Bandung
Indonesia
elandafikri@yahoo.com

Hazardous and toxic materials are not only produced by industrial sectors, but also by household sector. Unfortunately, no establish regulation and standard operational procedure was found for handling Household Toxic Hazardous Waste (HTHW) in Indonesia. Most of HTHW are currently mixed with domestics waste. So that, it can impact on the health and the reduction environmental quality.

The research aimed to produce the most effective and efficient scenario of HTHW by considering the impact on the environment especially related to global warming potential (GWP). This research used Life Cycle Assessment (LCA) approach according to ISO 14040 : 2006 by using 150 kg of HTHW. The impact category (LCIA) was observed and limited on global warming with the indicator of greenhouse gas (GHG) emission. The LCIA method used was IPCC 2007 GWP 100a V1.01 by using Simapro program version 7.1 and TDEPs Guidlines.

The result show, scenario 2 with recycling HTHW is the best scenario based on the LCA approach. The impact of GHG emissions is only about 135,25 kg CO\textsubscript{2} eq release to environment. This scenario can reduce the GHG impact of 17.57% compared with current conditions. The strength of this research is the ability to analyze the phenomenon scientifically. Most institutions or researchers stated that waste management using incinerator contributed high emission toward the environment. The statement is true indeed if it is viewed from one side point of view that is combustion point, but a lot of researchers who did not see that in fact waste management has strong enough side effect. It can be seen from the previous process or when the management process was contributing the life-cycle unit. In this point, the benefit of using LCA method is able to study the environment effect from cradle to grave. In other words, it is not only the final output resulted, but also the material input and the process included in the study of environment effect.

Recycling activity as a part of the best scenario is an important activity in the waste management practice. Recycling would be returned to the previous materials for the market selected to be reusable products. There are many benefits from the recycling. At least it protects natural sources and decreases the effect toward environment. Recycling can support landfill capacity, besides this activity can reduce well water pollution (Suyoto, 2004). This research result is supported by the previous research result showing the same point related to the benefit of recycling. The research result shows that recycling can reach the significant energy saving including the reduce of greenhouse gas emission. It is supported by the research conducted by Finnveden and Ekvall (1998) in Sweden, Chen and Lin (2008) in Taipei (Taiwan), Liamsanguan and Gheewala (2008) in Phuket, Thailand, Batool and Chuadhry (2009) in Lahore (Pakistan), and King and Gutberlet (2013) in Riberiao Pires (Brazil). Moreover, recycling lower the economic cost (Eriksson et al., 2005), and can contribute in the preservation of natural resources (Batool & Chuadhry, 2009).
Macro Determinants Of Modern Contraceptive Use In Indonesia: A Panel Data Analysis

Titik Harsanti
Titik Harsanti; Rudi Salam
Institute of Statistics
Indonesia
titik@stis.ac.id

In the developing countries, Policy makers and program managers focused on implementing effective programs to reduce high and unwanted fertility because of contribution of high fertility to rapid population growth and poor reproductive health. Indonesia, a country with the fourth largest population in the world, launches family planning in 1970 as a national program to reduce the population growth and get better reproductive health. When the program first launched, Indonesia fertility rate was 5.47, become 3.02 in 1990 and 2.56 in 2002. But, in the last 10 years, Indonesia fertility rate become stagnant, that is 2.59 in 2007 and 2.60 in 2012.

The focus of this study is to identify macro determinants - such as female mean years of schooling, female labor force participation and regional gross domestic product per capita - of modern contraceptive use related with fertility rate in 26 provinces in Indonesia.

Panel data from 26 provinces are drawn from 1994, 1997, 2002, 2007 and 2012 Indonesia Demographic and Health Survey. The study employed panel data regression to identify determinant factor of prevalence modern contraceptive.

Female mean years of schooling is the most significant variable influencing modern contraceptive use. Based on 2012 Demographic and Health Survey data, female mean years of schooling all provinces in Indonesia is still 7.9 year and the largest is DKI Jakarta with 10.1 year. Female labor force participation and regional gross domestic product are not significant variables influencing modern contraceptive use.

Due to results, female education is an important variable to bring better result in reducing population growth and poor reproductive health as family planning program in Indonesia. Nine years compulsory education program needs to be more serious implementation.
Malaysian Willingness To Pay For Healthcare And Their Influencing Factors

Azimatun Noor Aizuddin  
Azimatun Noor Aizuddin; Saperi Sulong; Syed Mohamed Aljunid 
University Kebangsaan Malaysia 
Malaysia 
azimatunnoor@gmail.com

Health is an intrinsic human right as well as a central input to poverty reduction and socioeconomic development. As the healthcare expenditure is further inflated, healthcare finance is one of the sensitive issues that currently been spoke and discuss by many people even in Malaysia. The main problem is to contain healthcare cost which currently, majority been finance by the government. Therefore, Malaysia needs one healthcare financial scheme to solve these problems.

By assessing willingness to pay for healthcare by individual, the study will help the policy maker to identify the group of individual and methods in sharing these financial burdens. The study objective is to study the ability and willingness to pay of household in Peninsular Malaysia to contribute to National Health Financing Scheme.

It was a cross sectional study involving 1154 household addresses from 4 states that have been selected using multistage random sampling by Malaysia Statistic Department. Face to face interviewed using a validated structured questionnaire were conducted from February until September 2014.

Seven hundred seventy four (774) respondents managed to be interviewed. The age of the household heads ranged from 19 to 87 years old (mean=48.93; SD=13.29 years). Majority of respondents are Malay 532 (68.7%), 79.5% of household heads were married with number of dependent between 0 17 people (mean 3.14; SD 2.08) and 73.4% have middle and high education level. The households incomes are between RM200.00 to RM28, 600.00 (mean =RM3, 140.18; SD= 2,822.13). Majority (63.7%) of the households are willing to pay more than RM1.00 for government out patient clinic registration fee but most (83.3%) of them are not willing to pay more than RM30.00 for private clinic treatment charges for simple cases. Majority of household (91.2%) agreed that the National Healthcare Financing Scheme (NHFS) should be established, with 55.8% of respondents proposed that the NHFS to be handled by a government body. Majority (82.2%) of the households are willing to contribute to NHFS 0.5-1.0% of their monthly salary deduction. Majority of households (70.9%) are willing to contribute 1.0-2.0% of their monthly income to NHFS to gain access to both public and private healthcare basic services. Factors that were found to have significant associations with WTP for healthcare were number of dependent, education, income, choice of healthcare services. Factors that were found to have significant associations with WTP NHFS were age, ethnicity, education, income and choice of inpatients services. Majority of Malaysian population willing to pay for their healthcare, accept and willing to contribute for future Malaysian National Healthcare Financing Scheme.
Maternal Health Program Performance In Indonesia: Multilevel Model Of Maternal Health Program Indicator (K4/Fourth Antenatal Visit) In Health Center

Solha Elrifda

Solha Elrifda
Health Politechnic of Jambi
Indonesia
selrifda@yahoo.com

Maternal deaths can be prevented with adequate antenatal care. Antenatal care is very important because through this process can be built mutual trust between clients and health workers, obtained basic information about the health of the mother and her pregnancy, so it can be pursued the best conditions for both mother and fetus. Evidence suggests that not all women received optimal services during her pregnancy, although based on recording and reporting system, its shows that government achieved the performance's targets. This is a reflection of the health care provider performance (in this case is Puskesmas/health center).

The study aimed to seek a multilevel model of maternal health program performance determinants (performance indicator K4/fourth antenatal visit) at the primary care level in Indonesia, and the policy options that can be implemented as an effort to improve the performance of the program.

The study used Mix Methods with cross sectional design; a quantitative approach was used to develop confirmatory model, and qualitative exploratory (to explore the problems). The sample was obtained from secondary data from Indicators Achievement of Program Nutrition and MCH Strategic Plan 2012 in 8 provinces survey, which has 2002 toddler’s mother as a sample from 16 districts/cities, 64 health centers, and 128 selected villages in Indonesia. The analysis also includes dataset from Puskesmas and villages. Informant for qualitative study was from relevant stakeholders of maternal health programs both at the health centers, district/city, as well as the central level. Multilevel analysis used for quantitative data, and domain analysis and taxonomy for qualitative data

The results showed that 79% of mothers of at least 4 times or more antenatal visits to a health worker. There is a relationship between all of individual level's variables (age, education, occupation, economic status, and satisfaction) with K4 performance. There are similar with the results of the Tipping and Segal's study (1995) which shows that the decision to used the medical services is affected by variations in socio-economic, gender, age, social status of women, the type of disease, access to services, and beliefs about the quality of service (MacKian, nd). Research Chote et al (2011), showed that antenatal visits are influenced by maternal education, maternal employment, and ethnicity. Similarly, the study Habib et al (2011), which proved a predictor of the ANC are education, employment, in addition to the number of the population served, presence, physician age, native language, nationality and qualifications.

There are differences in performance between health centers K4 (MOR models GS 2,234), this means that the chances of K4 performance differ between one health center to another health
center by 2.234 times. The variables that contribute to differences in performance between health centers are resources (MOR changes 7.507%), capacitation of human resources (MOR changes 1.870%), planning (changes MOR 1.269%), and focus on the customer (MOR changes -1.194%), although a small contribution. Satisfaction on previous antenatal care have contributed most to the performance of K4, after controlling other variables.

Based on indepth interviews with the person in charge of maternal health program in health centers showed that, one of the obstacles in the achievement of performance K4 is the lack of knowledge of mothers on the importance of antenatal care, and geographical problem that raises the difficulty of access to health facilities.
Maternal Nutrient Intakes And Duration Of Predominant Breastfeeding

Fikawati S  
Fikawati S; Syafiq A; Karima A  
Universitas Indonesia  
Indonesia  
fikawati@ui.ac.id

Successful duration of predominant breastfeeding for 24 weeks is difficult to achieve in Indonesia. After 10 years policy of breastfeeding has been applied, the prevalence is still low. Almost all efforts have been done to intervene except the aspect of maternal consumption during lactation.

This study aimed at analyzing the association between lactating mother nutrient intakes and duration of predominant breastfeeding.

This study used secondary data sets from a prospective cohort study conducted in Indonesia in January-December 2012. The subjects were followed for 24 weeks after delivery starting from the final trimester of pregnancy until 6 months postpartum. Maternal and infant anthropometric data (mothers weight and infants weight and length) were collected until 6 months postpartum. Nutrient intake data was collected through Semi-quantitative Food Frequency Questionnaire. Re-analyses of the data were carried out to have a comparison between groups of mother based on their duration of predominant breast-feeding.

There were no differences in all variables of socio-demographic characteristic and maternal/infant nutritional status in two breastfeeding groups. This study shows that mothers who consumed energy 2100 kcal/day had 4 times higher probability, and 5 times higher probability after controlled by others variables, to be successfully providing predominant breast-feeding for 24 weeks. Survival analysis shows that mothers with adequate energy intake during lactation period could survive to provide predominant breast-feeding until the end of the follow-up period.
Measuring Levels Of Citizen Public Health Emergency Preparedness In Hong Kong: A Cross-Sectional Study

Greta Tam
Greta Tam; Emily YY Chan; Calvin KY Cheng; Huang Zhe
Chinese University of Hong Kong
Hong Kong
gretatam00@gmail.com

Since SARS epidemic in 2003, Hong Kong has been vulnerable to several major epidemic risks and disasters. The increasing human H7N9 influenza A infection confirmed cases in China since 2013 has attracted global attention. Research has shown that citizen preparedness, which includes possessing a disaster kit, saves lives. However, the level of preparedness of Hong Kong citizens has not been studied.

This study aims to compare the preparedness levels of different demographic sectors of the Hong Kong population. This study also examines the levels of personal preparedness for disasters and infectious diseases, during the second wave of A/H7N9 infection in Hong Kong.

A cross-sectional, population-based telephone survey study (n=1,020) was conducted in Hong Kong in February 2014. Information on individual and household pandemic preparedness were collected and analyzed.

The study response rate was 72%. Only 3.4% of Hong Kong residents had a complete household preparedness kit. People with higher education, female gender, white collar, living in private permanent housing, more family members and higher income had better household preparedness.

In terms of general preparedness, most respondents possessed first aid kit, extra food and water and basic medication, but lacked long-term medication. In terms of specific infectious disease preparedness, most respondents possessed masks and alcohol rub but lacked antivirals.

At-risk populations were not more likely than the general population to have good household preparedness. Future campaigns to promote personal preparedness should target vulnerable populations as well as those with lower education, males, blue collar, living in public housing, fewer family members and lower income. Awareness should be raised regarding the need for preparing adequate medication, in the event of public health emergencies.
Measuring Patient Safety Climate: A Review Of Surveys In The Indonesian Hospital

Emma Rachmawati
Emma Rachmawati; Ony Linda; Ipik M Fikri
Faculty of Health Sciences, University of Muhammadiyah Prof DR HAMKA (UHAMKA) Jakarta Indonesia

Healthcare providers have been encouraged to assess the current state of their safety culture in the intention of enhancing the level of patient safety in their organization. Concern over the safety culture assessment within Indonesian hospital system was raised following a series of studies, first in Java Island (only for private hospital in five provinces, Rachmawati, 2012), and subsequently in one province: DKI Jakarta (Rachmawati et al., 2014). The safety culture can be measured by the safety climate, proposed that it is a more appropriate term for questionnaire-based survey, a snapshot of the prevailing safety culture. The measures of patient safety culture (or climate) are proliferating, growth in this area parallels increasing external pressure on healthcare organization from international or national accreditation and safety agencies.

It is recommended from many years ago that high hazard industries such as hospital improving patient safety by addressing organizational cultural issues. Surveys measuring a patient safety climate considered predictive of health outcomes have begun to emerge. This paper compares the general characteristics, dimensions covered, psychometrics performed, and uses in studies of patient safety climate surveys within Indonesian hospitals.

The study was conducted through systematic literature review, to identify and review surveys used to measure patient safety climate in Indonesian hospital settings; abstract and the results were reviewed, references searched. The history, purpose, intended respondents, theoretical framework, content, methodology, and psychometrics of the two surveys were also reviewed. The authors reviewed the most common domains covered, we also independently reviewed the literature available for each survey to determine the psychometric performed and to identify how these survey have been used within the Indonesian hospitals.

No ethics committee approval was necessary for this review. The two surveys reviewed were designed to be used in different types of settings: the first survey in private hospitals (faith based hospitals) settings in several geographical areas (five provinces in Java Island, Indonesia), the other survey in various types of hospital settings in one area/province. All surveys were designed for individuals/employees in all departments to complete, not including the CEOs of the hospitals.

All the surveys used a 5-point or 6-point Likert scale, mostly to measure respondents' attitudes about various aspects of patient safety. There was a quite large range in the number of items to be completed (50-80 items).

All the surveys evaluated four dimensions/variables of patient safety climate: Transformational Leadership (for CEOs level, consists of 4 indicators: Intellectual stimulation, Inspirational Motivation,
Individualized Consideration, Idealized Influence), Teamwork (for unit level, consists of Communication, Trust, Cohesiveness), Individual Consciousness (for individual level, consists of 5 indicators: safety priority, risk assessment, learner, self-competence assessment, obedience) and Patient Safety Climate (for hospital level, consists of 5 indicators: management commitment, empowerment of employee, report system, reward system, organizational identity). The difference between those surveys was in the number of the items in every indicator.

The quantity and quality of psychometric testing varied considerably across the surveys. In the first survey, data analyzed by Structural Equation Model 2nd phase using Smart-PLS and LISREL software, but the other survey only used LISREL software. Analysis in those surveys showed that variable of patient safety was influenced by all the variables that proposed. The first survey showed that the transformational leadership variable was the variable that mostly affects the patient safety climate, this results was different with the other survey which the teamwork variable was the mostly affects than other variables. The Composite Reliability (CR), the Variance Extract (VE), RMSEA scores and some GoF indicators of the measurement model in the surveys showed the close fit model and mediocre fit and The Q Square Predictive Relevance in the first survey was 69.17%. It means that the theoretical model proposed in those surveys can be used.

Those surveys have been used primarily for intra- and inter-institutional/hospitals comparisons. None of the surveys explores the patient safety climate score of the hospital associated with the improved patient outcome.

Although those surveys were the firstly patient safety climate measurement in Indonesia, those surveys have been shown reliable, comprehensive and good psychometric testing. The measurement of patient safety climate is a dynamic field and those surveys not yet published, while it may detects employee concerns about patient safety and may help foster communications around the topic of patient safety. There is a limited evidence which administrators and policymakers in Indonesia should be cautious in the interpretation of those surveys.
Medicine Pricing Under Indonesia's National Procurement System

Prastuti Soewondo  
Prastuti Soewondo; Yusi Anggriani  
Faculty of Public Health Universitas Indonesia  
Indonesia  
prastuti.s@gmail.com

In January 2014, Indonesia had a policy moving toward Universal Health Coverage (UHC) through a single payer managed by Social Health Security Agency (BPJS). As medicines are a key component in delivery, the Ministry of Health (MoH) has implemented a new pharmaceutical system: the National Drug Formulary (FORNAS) and an electronic procurement system (e-catalogue).

This study aims to evaluate the implementation of pricing mechanism under e-catalogue. Qualitative methods were applied to assess the implementation of pricing policy under E-Catalogue. The information was obtained through in-depth interviews and focus group discussion.

The MoH sets a ceiling price for each product listed in the E-Catalogue. For generics, pharmaceutical companies are invited by National Procurement (LKPP) to participate in tender of its products in reference to a set of ceiling prices. For originator and branded generic products, LKPP and MoH negotiates the price with respective companies, referring to a set of ceiling prices. Final negotiated prices of originator and branded generic are listed in the e-catalog, that differs by regions to accommodate distribution cost. From the perspective of pharmaceutical industry, the study claimed that ceiling price set by the MoH (Harga Perkiraan Sendiri-HPS) does not fully cover real cost of manufacturing and distribution. Since ceiling prices are set too low, distributors often refuse to participate in national tender. From the perspective of distributors, distribution costs included in E-Catalogue prices were perceived as insufficient to deliver medicines, especially to rural areas. To date, distribution costs for shipment to four regions are top-up to product prices as a certain percentage of medicine prices. Using this formula, distributors claim that the low-value products become unappealing since distribution cost is very minimal and frequently insufficient to cover the actual distribution costs, which are fixed and independent on the value of a product. In contrast, a percentage distribution cost of high-value products is more appealing to suppliers because of the high value on distribution cost. Using a certain percentage distribution cost of each product provides perverse incentives to distribute only higher-value medicines under this system. This unintended consequence impedes movement toward increased use of high-quality low-cost generic products. This unfortunate circumstance has in turn lead to a lack of availability on medicines listed in E-catalogue in rural areas.

Using a certain percentage of medicine price to cover distribution cost to four regions across Indonesia may not be appealing to suppliers, since it does not fully cover the real distribution cost, especially to low-value products. This may impact drug availability due to supply chain guarantee. The Government should urgently evaluate ceiling prices on medicine under the new system. Setting the ceiling price of medicines that include adequate fixed (not as percentage) distribution cost mark-ups may be imposed.
Midwife Role In The Village Between Urban And Rural Areas In Order To Reduce Maternal Mortality Rate (Case Study In The District Jeneponto)

Yusriani
Yusriani ; Suchi Avnalurini Sharif
Indonesian Moslem University (UMI)
Indonesia
yusriani83@rocketmail.com

One health problem in Indonesia is the high of Maternal Mortality Rate, it requires attention with implementing improving maternal health. Midwives in this village is a health worker closest to the community, and most are expected to know the state of health of pregnant women, birth mothers and babies in the village. Based on data from the Department of Health Jeneponto Maternal Mortality Rate (MMR) in 2014 as many as 14 people.

This study aimed to compare the role of midwife in the village between urban and rural in order to reduce MMR in Jeneponto. This research uses comparative studies and there was no control variables or treatment of researchers. The population in the study were all midwives in urban areas as many as 24 people consist of Bontomate'ne and Tamalatea health centers and rural areas as many as 23 people consist of Bululoe and Arungkeke health centers. Teknik sampling is total sampling. Data analysis with Mann Whitney test.

The result showed that there was no difference in the role of midwives in the form of counseling, referral and family planning services between urban and rural districts. While the role of midwives in ANC and training TBAs has a significant difference between urban and rural districts. Overall there are differences in the role of midwife between urban and rural districts Jeneponto.

The expected increase in the ability of midwives through training, policy needs to be made more by cooperation between the health center and the village government in the provision of equipment and facilities to shelter midwives so that midwives can work well.
Model Integration Of Health Information System In Indonesia: Case Study On AIDS, TB, And Malaria

Besral
Besral; R Sutiawan; Popy Yuniar; Rico Kurniawan
Universitas Indonesia
Indonesia
besral@yahoo.com

Health information systems in Indonesia currently fragmented in each program, running his own alone, and there is no integration with each other. This leads to inefficiency and poor quality of the health data. The main problem for health data is there is no accurate data available on time. At the central level Center for Data and Information (Pusdatin) Ministry of Health had been started to initiate for integrating the separate data and information systems from each program. In contrast, each programs (including AIDS, TB, and Malaria) still continue to develop their own information systems, adjusting to their needs of data and information, and have not had a road map for integration, and have not yet standard for dictionary data in the software application.

This research aims to develop Model Integration of Health Information System, a Case Study on Programs of AIDS, TBC, and Malaria in the platform of Health Management Information System (HIMS) Generic version in Indonesia.

This operational research is restricted to the program of AIDS, TB, and Malaria information systems, the basic platform for integration is the Health Management Information System Generic version in Indonesia (HIMS Generic), implementation at the health center and District Health Office, as well as the design model of integration is restricted on certain variables selected purposively. Operational research activities are divided into two stages, the first stage is to conduct assessment of the existing information systems that are running at the moment, to describe existing information systems. The two District and ten Community Health Center in East Nusa Tenggara province has been selected to the assessment. The second stage is to design the integration information systems in the platform of HIMS Generic.

The integrating initiation had been started, there is agreement between Center for Data & Information and all main unit in Ministry of Health to use 115 priority indicators and 37 indicators to be displayed on the dashboard of Ministry of Health, this including the indicator of Pharmaceutical & Medical Devices, Nutrition & Maternal and Child Health, Diseases Control and Environment, Medical Services, Health Promotion, and Human Resources. The technical problems still continue, each of programs (including AIDS, TB, and Malaria) still continue to develop their own information systems.

The behavior problem still exist, very low utilization of data and information for policy makers, the differences in the needs of data and information between their respective programs (AIDS, TB, Malaria) with Pusdatin and policy maker. Pusdatin and policy maker requires a data and information to measure output and outcome indicators of health, while the respective programs always requires a data and information to measure input and process indicators.
In general, information systems that have been developed in each of these programs (AIDS, TB, and Malaria) are not designed for integration. Thus, whenever needed access to integrated information systems with different sources, the sources and their data structures are not suitable, so that the necessary adaptation and data reconciliation functions is developed.

The organizational problem-solving plan is needed to make a legal basis that requires the integration of information systems, there should be no information system that runs itself alone. The new regulation should be integrated information system, each program should be built in one modules that have been provided in the HMIS Generic. The principle of efficiency and effectiveness in building information systems must be improved.

The technical problem-solving plan is existing information systems (AIDS, TB, Malaria) in the short-term will be developed bridging datawarehouses/webservices for sharing data and information with other unit in the District/Provincial Health Office and with the main unit in the Ministry of Health at central level. In the medium-term, it is recommended to finalize the Generic version of HMIS application program and getting stable application, then gradually insert information systems of HIV/AIDS, TBC, and Malaria into the HMIS Generic version.

While in the long-term should be made design and protocol for their integration with HMIS Generic. Need to prepare resources and infrastructure such as providing at least 5 (five) pieces of computers and networks in the health center is absolutely necessary. Each program will enter their own data, will process their data, and get the output/report from HMIS Generic application in accordance with the agreed format. The data can then be accessed by all units in the district health offices, provincial, and central level.
Model Of Controlling Dengue Haemorrhagic Fever Based On Climate Factors In Endemic Area

Ririh Yudhastuti
Ririh Yudhastuti; Hari Basuki Notobroto
Public Health Faculty, Airlangga University
Indonesia
ririh.unair@gmail.com

Environment, both biological and physical, are instrumental factor in the emerging and the spreading of dengue disease. The Climate change may affects to infectious disease pattern and the risk of transmission increasement. Dengue Haemorrhagic Fever (DHF) has become endemic diseases in the major cities in Indonesia. It has been suspected that dengue out breaks that occur each year in almost all of Indonesia areas is closely related to weather patterns.

The purpose of this study was to determine the influence of climate factors (rainfall, humidity, air temperature and solar radiation) towards free number larvae in Surabaya municipal during the year 2009-2011 and provides recommendations control model of Dengue Haemorrhagic Fever based on Climate Factors.

The design of the study is a time series studies of ecology. The research was conducted in May - June 2011 and located in the Surabaya municipal, East Java by using secondary data. The number of dengue cases data is derived from the reports listed in Surabaya Health Office. Climate data used are rainfall data, temperature, humidity, and solar radiation obtained from the Meteorology and Geophysics Board (BMKG) Station of Juanda and Station of Perak Surabaya.

The results showed that only humidity had influence toward free number larvae and free number larvae had no influence toward number of dengue disease. The conclusion of this study is that the humidity had a significant influence toward free number larvae and free number larvae had no a significant influence toward number of dengue disease. The model of controlling Dengue Haemorrhagic Fever based on Climate Factors are Control of the source of disease, Control of the transmission media and Control of the exposure to the community. Therefore, in January “June periods it requires a good cooperation between the health department and community participation to early awareness efforts as a alert for all sides to perform quick and proper activities.
Community case management was introduced firstly in 2001 to address lack of professional health providers service coverage. This approach has given responsibility to the health cadres on managing sick children under five in the community (Winch et.all, 2002, Kelley & Black, 2001). Central Southern Timor (CST) district, East Nusa Tenggara Province, Indonesia implemented REACH (Reaching for Equity Access in Child Health) program since 2010. There are 215 health cadres and 236 motivators in Central Southern Timor (CST) have skill and capacity to provide curative service and health promotion for children under five who suffer pneumonia, diarrhea and malaria. Child survival program involving health cadres can significantly contribute to reduce child mortality (Kelly dkk, 2001, Andy dkk, 2007), improve community empowerment (Mack dkk, 2006) and give positive impact on the appropriateness of therapy and wider coverage of intervention (Andy dkk, 2007).

In general, this study aims to develop a model of service utilization of childhood case management in the community. More specific, this study aims 1) to develop concept, construct, variable, indicator and instrument of childhood illnesses case management in the community, 2) to describe service utilization, 3) to describe community acceptability, health center availability, health cadres availability, geographical accessibility and level of community empowerment, and 4) to understand correlation of variable contribute to the service utilization.

This is a combined qualitative-quantitative study. The research was designed as an ecology study, while the analysis techniques of quantitative study is using cross sectional method to the 5.502 out of 7.675 children under five years old. Cluster analysis is done to produce analysis unit of 40 villages for further statistic data processing. Ecology study is chosen due its easiness and less expensive for data which is available and recommended for research relate to policy (Lubinski & Humphreys, 1996). Cross sectional is used to capture correlation of dependent and independent variables in the point time (Creswell, 1994) while inductive paradigm of qualitative method is used based on the understanding that perspectives can be explored from social phenomenon such as voices, feels and perception from participant as subject of study (Emzir, 2011). Information collected for the qualitative study was conducted through programatic discusion and indept interview with program implementer, policy maker and mother of children under five. Data quantitative was collected to mother of children under five and health cadres as respondent. Interview guideline and questioners were developed based on the exploratory qualitative of preliminary study. Village data of service utilization and acceptability are processed from the children under five cencus in 40 villages while village data of accessibility and availability are processed from the secondary data of mapping. Community empowerment level data is primary collected from the cadres and motivator.
Recall bias is one of the limitations found in this study by considering that respondents were asked to recall the illnesses of children under five for the last 12 months, implying recall bias. Bias in interpreting individual data that is aggregated to population data is also identified when ecology study is used. However, we found that the service utilization for prevention and curative childhood care management has not yet achieved universal coverage, while evidence suggests that the efficacy of key interventions for diarrhea, pneumonia, and malaria treatments as well as prevention such as sleeping under a bednet only apply if the universal service coverage is fulfilled (Baqui et al., 2002, Winch et al., 2008, Mazumder et al., 2010, Bhutta et al., 1999, Bharnagar, 2004, Sazawal, 1997, Lukacik, 2008).

This study found that only 76% of children aged 6-23 months have been exclusively breastfed, 62% slept under a bednet, and only 36% of children aged 12-23 months were fully immunized. Not all mothers have proper understanding of type, timing, and benefit of immunization. 71% of children under five in the study area have experienced being sick. Diarrhea and coughing are the most common symptoms complained by mothers. 18% of them are categorized as pneumonia, 11% malaria, and 4% dysentery. Unexpectedly, the coverage of diarrhea treatment using ORS and zinc is even lower than recent basic health service research in 2008 which is only 31%. Similar situations occur for malaria treatment that only 35% of children were covered. Major reasons of these situations are misperception of severity of illnesses.

There are two models produced from this study: 1) utilization mathematical model of prevention service, 2) utilization mathematical model of curative service. In multivariate linear regression, we found that the level of community empowerment can predict the utilization of preventive services ($r^2 = 0.355; R = 16\%$). Altogether, the level of community empowerment ($r^2 = 0.196$) and cadre availability ($r^2 = 0.678$) can predict curative utilization with $R = 52.5\%$. This study concludes that delivery service of community case management of childhood illnesses through the C-IMCI program is relevant to be implemented in many areas in Indonesia which have barriers in geographic accessibility and health facility availability.
Breastfeeding is a primary step for optimal health and growth of the child. The first thousand days of life, which began in the fetus in the womb until the child is two years old is the most important period and the need to get the most attention. At this time, the condition of women has increased due to the transition of women from families of workers into labor. Trends indicate that women's access to formal employment has increased over time (Fikawati & Shafiq, 2010). The continuity of the process of breastfeeding when the mother went back to work is a serious issue that must be followed in order to program exclusive breastfeeding for the first 6 months of life can be achieved (Wyatt, 2002).

To know mother's participation in the family economics of exclusive breastfeeding in Indonesia and determine the relationship of the mother's participation in the family economics of exclusive breastfeeding after controlled by socio-demographic factors and health care utilization factors.

The design study is cross sectional with secondary data IDHS 2012 with a sample of 1358 amounted to 15-49 year-old mother who has a 0-5 month old baby in Indonesia. Analysis is using logistic regression model.

Participation of mothers in the family economy can lower the chance of giving the exclusive breastfeeding where're mothers who work as laborers / employees at all times 1.54 times more risky not to give exclusive breastfeeding than mothers who do not work after being controlled by the variable counfonder (p = 0.038; 95% CI = 1.0 to 2.3). This can be due to constraints related to distance and transportation to the workplace either congestion or other interference. On the average, the labors spent travel time of thirty minutes to an hour to work. But there are also workers who journey to work up to two hours. In his research Wyatt (2002) and Mills (2009) that mothers work more than 20 hours per week are at greater risk to stop breastfeeding. Wyatt (2002) and Mills (2009) stated that the decision to stop breastfeeding when I started back to work is part of the preparation and during prenatal education, but there are still many women who do not receive information on the preparation breastfeeding when returning to work well in the prenatal period. Khanal et al (2013) reported on antenatal, pregnant women will gain knowledge about exclusive breastfeeding, along with increasing the number of antenatal visits of pregnant women who carried the mother will be increasingly exposed to the information delivered by a midwife or other health personnel.

Wyatt (2002) and Mills (2009) found that working mothers will breastfeed face a variety of obstacles. This will affect working mothers to have low confidence in exclusive breastfeeding. The obstacles mentioned above could affect the let down reflex in the establishment and expenditure of
milk. As a result of imperfect reflexes let down, there will be accumulation of milk in the alveoli that are clinically visible breasts enlarged. This pain will increase so that stress will increase. Reduced stimulation by the baby's breastfeeding for example, when the strength and frequency of which is less suction and the shortness of time breastfeeding means the release of prolactin from the pituitary is reduced, so that the manufacture of milk decreased (Soetjiningsih, 1997).

Availability of lactation room conditions and supporting facilities today do not fully comply with the rules set out in legislation as mentioned above. Also required daycare as a complement to breast milk so that the remaining space can bring their children to the workplace that will enhance the success of exclusive breastfeeding program (Handayani, 2012). In fact, there are still companies that do not provide lactation space, so that working women express milk in the toilets or mushola women and store it in the refrigerator pantry along with food and beverages other workers (Kartika et al, 2014).
Mother's Perception On Early Reproductive Health Education

Eti Rimawati

Eti Rimawati; Nurjanah; Vilda Ana Veria S; Sri Handayani
Dian Nuswantoro University
Indonesia
erihamas@yahoo.com

Commission of protection violence-victims based on gender and child in Central Java Province, showed violence based on gender and child in 2011 were 2737 cases with 40% are child, gradually increased in 2012 were 2883 cases with 47% are child. In first trimester of 2013 found 1082 cases with 45% are child and mainly cases are sexual abuse 55%. (bp3akb, 2014)

Mother in a family having main role as educator that ability to arrange and lead their children. Mother as person who closer to their children so her role to educate about reproductive health is important (Gunarsa, 2004).

Knowledge about sexuality among children can prevent sexual storage, this caused they teach about gender role, attitude of men and women, and how to interact with opposite sex. Sexual education among children also can prevent child from sexual abuse. With knowledge of sexuality, they knew which behaviors are sexual abuses.

The aim of the research is to describe of mothers perception on early reproductive health education. Research design used quantitative descriptive and qualitative approach, aims to describe parents behavior on giving early health reproductive education. Quantitative samples were 100 toddlers mother in Polaman village sub-district of Mijen, Semarang city about mothers perception of early reproductive health education. Qualitative had been done by focus group discussion among 14 toddlers mother about deeper information of perception and behavior in educate children. Quantitative data analysis by descriptive and qualitative data analysis by thematic analysis, that is describe perception and behavior of public in giving early reproductive health education.

Polaman is a village of Mijen subdistrict in Semarang. Polaman divide into 3 sub village and 9 group householders. (Semarang, 2012) Most of toddlers mothers are 30-39 years old (49%), their education are middle school (32%), no work (81%) and daily source of information is television (56%). Most of toddlers mother (75%) did not know about definition of reproductive health. They assumed that reproductive health related to health about food consumption, cleaning houses and body healthy. Few respondents said that reproductive health is health related to sex, birth delivery and health of mother and child. They did not mention about reproductive organs. Most of them cannot answer that man reproductive organs are penis, testis and vas deferens. While women reproductive organs are breast, vagina, uterus, and tuba falopi. To spell the reproductive organs, the used local language such as Kacok or Bayem for vagina, and burung or titit for penis. As presented by the mothers, the majority (73%) feel embarrassed when talking about the reproductive organs to their children so that the use of certain terms to represent the names of the reproductive organs, and they tend to silence their questions. They assume the children will know itself later when it becomes growing up. Javanese people who hate anything directly about the problem so that convey something in a figurative form, like or satire. Figurative forms can be tangible objects, words
or sentences (Herusatoto, 2008) They do not agree about giving sex education to early age (65%) because sex education mean teaching children about sexual relation. For them reproductive health is taboo and occur negative stigma. They more agree if use reproductive health education not sex education, it can make positive stigma. 70% of toddlers mother do not agree to give children about reproductive health in early age such as 4 or 5 years old because children is still not ready to receive information, they said that better to give them when adolescence, when the girl got first menstruation and after sunat for boy. Knowledge of mother about reproductive health is cannot separated with sources of information that have had and social and cultural factors. Mostly (82%), toddlers mother never had information about reproductive health, even from television or health provider. Information having big roles to changes individual behaviors. Social and cultural factors consider that reproductive health is taboo and embarrassment have impact in delayed of searching information about reproductive health. This causes mothers have low knowledge and attitude that make their perception not good in giving reproductive health education. Berns said caring children is an interaction process and influence to both side, for children and also parents. (R.M.Berns, 2007) Agreed with Brooks (2001) that said caring children is process with some action and an interaction doing by parent to support children grow. Caring is not only one side relation which parents influence the children but have more meaning, that caring is interaction process between parents and children that influence by culture and social structure. (Brooks, 2001)
New & Simple Approach In Dengue Real Time Surveillance - A Sri Lankan Experience

Warnasekara Y.P.J.N
Warnasekara Y.P.J.N; Marage P.M.N.C; Athurupana A.A.S.D; Koonthota S.D; Agampodi S.B; Dahanayaka N.J
Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka
Sri Lanka
jwarnasekara@yahoo.com

Despite all control measures taken, dengue continued to be one of the most important public health problems in Sri Lanka. The routine passive notification system in Sri Lanka seemed unable to control new outbreaks, especially due to the fact that the gap between first detection and public health response is around seven days. We field-tested a rapid notification system, based on GPS locations and rapid communication to overcome this problem.

Introduce a rapid surveillance system using mobile technology. A real time spatio-temporal surveillance of dengue cases admitted to Teaching Hospital Anuradhapura (THA), Sri Lanka was carried out. All suspected cases were visited by a pre intern medical officer and the location mapping of residence and details of travel history was obtained using locus free software and a tablet computer. A potential indigenous dengue transmission (an outbreak) was defined as having two cases clustered in time and space or a confirmed case without a travel history. Regional epidemiologist was informed immediately over the phone on suspected indigenous transmission.

Total of 180 suspected dengue patients were admitted to THA from October to February 2014. Of them, 132 (73.3%) were males and 145 (80.6%) had visited or stayed outside Anuradhapura district during the incubation period. Spatio-temporal clustering of dengue cases was observed in two occasions among the patients without a travel history and 5 clusters of dengue cases were observed among the patients who had visited or stayed outside the Anuradhapura district. All places had conducive environments for mosquito breeding sites. The public health authorities of Anuradhapura district were notified by phone just after mapping and flagging the case as an outbreak. Public health response to prevent outbreaks was taken within 24-48 hours of admission of suspected case. Two of the instances were clearly the index cases of possible dengue outbreaks.

Therefore use of portable tablet computers and open source software to use dengue mapping could be implemented with minimal resources even in remote settings. The delay of public health response in dengue control could be minimize with this approach.
Non Smoking Area Modelling At The Household Level

Fenny Etrawati
Najmah; Fenny Etrawati; Feranita Utama; Yeni
Public Health Faculty, Sriwijaya University
Indonesia
najem240783@gmail.com

Smoking behavior had a negative impact for both active and passive smokers in terms of health and economic. Regulation of Non Smoking Area have been published earlier but its application have not concerning at the household level. Smoking behavior is not only bad for health but also the health of active smokers proved to affect the health status of passive smoking. In 2011, The Tobacco Atlas noted that passive smoking at least 600,000 deaths and 75 % of them women and children anak.8 In order to reduce the magnitude of the impact of the smoking behavior, required an initial effort smoke region without the household level in Ogan Ilir. Composition of the population in this region which 29.3 % are students / student believed to be susceptible to influence the behavior of both active and passive smoking. Implementation of a comprehensive intervention model adopted from the Centers for Disease Controland Prevention (CDC) is expected to reduce the impact of smoking behavior at the household level.

This study aims to identify the effectiveness of integrated intervention non-smoking area at the household level. This study was conducted in 2014 using cluster design experiments in 4 villages at Ogan Ilir district-South Sumatra which 200 samples of household heads were selected through cluster random sampling method. Interventions included integrated counseling, provision of substitute candy cigarettes and healthy savings in one month.

Inclusion criteria for the sampling to be intervention group and a control group that does not intervene, namely (1) the respondent is head of household; (2) The status is married; (3) status of respondents were current smokers. Stages of research was conducted on the three important stages, namely: (1) the initial survey to see the picture of the characteristics of households in both rural and village control interventions; (2) intervention program conducted during the month against the elected head of the household from the village of interventions, including integrated counseling about smoking are given by trained health workers, provision of substitute herbal candy cigarettes, and a box for savings money with the aim of motivating to reduce smoking by allocate some cigarette money into it; (3) Post test carried out through field surveys in order to collect quantitative data in the intervention group. Univariate analysis includes variabeldemografi (employment, marital status, education, age, number of family members and the number of children in the home) and variable smoking behavior. Subsequently, bivariate analysis was performed with T-Test test using statistical tools to identify the difference in smoking behavior between intervention and non intervensi. Linier regression modeling conducted for the final stage.

The results showed that 46% of intervention is likely to reduce the smoking behavior of the respondents (RP 0.46) after controlled by the variable of education (RP 0.152) and attitude (RP 0.216) with p <0.0001. Intervention in the form of an integrated counseling, provision of substitute candy cigarettes and healthy kitty proven mamberikan significant effect on the respondent ’s
behavior changes after controlling for education and attitude variable. These interventions provide opportunities 46% to reduce smoking behavior. The measurement results show smoking rates in the home 14% lower in the intervention group compared with the non-intervention group. This indicates that public participation is good enough to realize Smoking Area at the household level.

The average money spent by the intervention group to buy cigarettes per day are for Rp.7000 (95% CI: Rp.1000-Rp.48000), whereas the non-intervention group Rp 10,000 (95% CI: Rp.1000-150,000). This integrated intervention proved successful change smoking behavior at household level, its necessary for participation of community and local health department to follow up the implementation continuously.

The study recommends to advocate the head of the family in the context of health education through integrated counseling that addresses the issues surrounding smoking behavior, socializing methods of cost effectiveness in smoking cessation therapy to a broader target group and the empowerment of health cadres in creating a household environment without smoke.
Sri Lanka is considered as a moderate burden country with about 9000 new cases detected every year. National Programme for TB Control and Chest Diseases conducts 26 district chest clinics. The DOTS strategy was introduced in 1995. Treatment compliance is vital in preventing drug resistant TB. Stigma related to TB is a hidden burden causing non-compliance.

To describe the proportion with non-compliance to treatment, extent of perceived disease-related stigma and associated factors, among patients receiving treatment for pulmonary tuberculosis (TB) at the Central Chest Clinic, Colombo, Sri Lanka.

A descriptive cross-sectional study was carried out in Central Chest Clinic, Colombo, among 426 patients with pulmonary TB, >15 years age, on treatment for two months or more, selected by systematic sampling from the daily clinic attendance register. Data collected by trained interviewers using a Pre-tested questionnaire after obtaining informed written consent. variables studied included: socio-demographic and economic factors, clinic visits, knowledge about TB and its treatment, substance abuse, treatment compliance and perception of stigmatization.

Mean age 47.52 (SD=15.55) years, 310 (72.8%) males. Among the participants, 7.3% (n=30; 95%CI=4.8%-9.8%) were non-compliant with treatment, 61.4% (n=261; 95%CI 57.1%-65.7%) reported as having the perception of stigmatized. Residing in urban sector-slums (p=0.023), having poor knowledge about TB and its treatment (p= 0.037), not visiting DOTS provider (p=0.045) and spending 500 rupees or more per clinic visit (p=0.044) were significantly associated with non-compliance. Male sex (p=0.0001), education level less than O/L (p=0.0001), being employed (p=0.0001), being a current smoker (p=0.045) and current alcohol consumption (p=0.045) were significantly associated with perception of stigmatized. Non-compliance and perceived stigma among TB patients were relatively high. Treatment compliance can be improved by giving adequate knowledge about TB and its treatment, encouraging to visit DOTS providers and paying more attention to patients residing in urban sector-slum areas.
Non-Fatal Injury In Thailand; Incidence Trends And Links To Alcohol.

Mami Wakabayashi
Mami Wakabayashi
Osaka University
Japan
wakabayashimami@gmail.com

Injury is one of major public health concerns as injury accounts for large part of disability-adjusted life year in in middle income courtiers such as Thailand. At the same time, harmful alcohol use is also leading global health risks. We analyze population based injury trends in Thailand, a middle income country undergoing rapid social change. The association between injury and alcohol use is poorly defined in such circumstances. Moreover we attempted to examine whether socio-economic status influence to incidence of injury in order to examine the association between change of individual socio-economic status and change incidence of injury.

Injury is one of major public health concerns as injury accounts for large part of disability-adjusted life year in in middle income courtiers such as Thailand. At the same time, harmful alcohol use is also leading global health risks. We analyze population based injury trends in Thailand, a middle income country undergoing rapid social change. The association between injury and alcohol use is poorly defined in such circumstances. Moreover we attempted to examine whether socio-economic status influence to incidence of injury in order to examine the association between change of individual socio-economic status and change incidence of injury.

A nationwide cohort of 39,978 Thai adult Open University students initially aged 15 to 87 years, participated in cross-sectional assessments both at baseline (2005) and 8 years later (2013). One-year recalled incident non-fatal traffic and non-traffic injuries were recorded. Alcohol consumption patterns were as follows: non-drinkers, occasional light drinkers, occasional heavy drinkers, regular drinkers, and ex-drinkers. Logistic regression revealed associations in 2005 and 2013 between injuries and alcohol consumption. Odds ratio estimates were adjusted for socio-demographic factors, stress, health behaviors and risk-taking behaviors. From those results and the different demographic characteristic from 2005 and 2013, we also examine the change of individual socioeconomic status and pattern of incidence of injury. We focus on education (3 points scales), income (3 point scales), and occupational level (4 point scales). We scored the change their status from 2005 to 2013. For example, a person who had high school degree in 2005 were scored 0 and if the person had university degree in 2013, we scored 2. We integrated those 3 SES measurements and analyzed the association between the SES score and patterns of incident non-fatal injury with multinomial logistic regression model.

We age-standardized the incidence estimates for 2013 using the age structure of 2005 and the respective 2013 incidence rates were 10% (non-traffic) and 5% (traffic). Both were reduced substantially (by 51% and 9%) and significantly (p<.001) from 2005. In both survey years, traffic injury was not associated with occasional heavy drinkers when adjusted for health and risk-taking behavior. Alcohol consumption was significantly associated with non-traffic injury in 2005, but the association disappeared in 2013. Non-traffic injury was associated with occasional heavy drinkers
(Adjusted OR 1.27 95% CI 1.15-1.40) in 2005, but not in 2013 (AOR 1.05 95% CI 0.92-1.19). What has made the difference association? People improve their socio-economic status from 2003 to 2013, the more people who avoid their injury in 2013 although they had overall injury (either traffic or non-traffic injury) in 2005. The group had significantly associated preventing injury (ORs 1.12 95% CI 1.04-1.21) compared people who did not change their SES status very much.

Our study found a downward secular trend of incidence for injury and less alcohol consumption. The association between alcohol consumption patterns and non-fatal injury weaken from 2005 and 2013.

The characteristic of population and social change might lead this change of association. For example, the follow-up population was basically higher socioeconomic status and healthier from the aspect of health behavior and mental health condition than 2013. More people acquire university degree, increase their income and got professional or managerial level job. They also did more frequently walking and moderate exercise, less alcohol and less smoking. Not only individual situation, but also national economic developments that lead to changes in working or living conditions at population level could contribute to reduced non-fatal injury prevalence. Within the 8 years, that population had higher socioeconomic status and health conscious and it may contribute the trend of injury.

Ex-drinker had significantly higher odds ratio of related injury even after adjusted other exposures. It may reflect that people quit alcohol drinking because of their injury, but we are not able to determinate the course and effect from out analysis.

We have examined non-fatal injury in the context of a health transition in Thailand. The reported data provides an insight into the impact of rapid changes in social and health behaviours and their relationship with traffic and non-traffic injury.
Nutrition And Early Life Factors And Obesity: Opportunities For Prevention

Colin W Binns
Colin W Binns; Mi Kyung Lee
School of Public Health Curtin University; Faculty of Health Sciences Murdoch University
Australia
c.binns@curtin.edu.au

Obesity is one of the most serious public health challenges facing the Asia Pacific region. The treatment of established obesity at all ages is difficult and prevention is the best option available. The prevalence of obesity has increased rapidly in recent years. In China the obesity levels in children in the 1980s were 1 to 2%, but three decades later this had increased to 20% or more in the large cities. Different criteria for classification of obesity, varying methods of measurement and the lack of age-adjusted data make it difficult to quantify the numbers and trends in child obesity for the region. However there is no doubt that obesity in children and adults is increasing throughout this region making research and teaching of causation and prevention are major issues for APACPH members. Early life factors have an important place in the prevention of obesity.

To describe the current status of evidence around the early life factors that can reduce the prevalence of obesity. The aim is eventually to establish and evaluate prevention programs based on the principles of public health.

A review of literature reviews and studies on infant nutrition and obesity. In particular the factors to be considered will include birth by caesarean section, antibiotic usage and early life nutrition. This paper used the evidence base compiled for the Australian Dietary Guidelines together with updated reviews and additional material where required. The literature was updated to July 2015

With the promotion of the DOHAD hypothesis over the past 80 years there has been increasing understanding of the relationship between early life exposures and later health. The great difficulty has been in achieving levels of evidence that are convincing for evidence based practice. The use of randomised controlled trials in breastfeeding is very limited for ethical reasons, but the number of observational studies and rigorous meta-analyses has provided a substantial evidence base. This review considers evidence linking prevention of obesity with breastfeeding and increases in obesity rates in infants delivered by caesarean section, the early life use of antibiotics, formula feeding (particularly high protein formula)

In the most recent (2015) meta-analysis of breastfeeding and the prevention of obesity Horta and colleagues updated the previous two WHO reports and included 133 effect estimates. Breastfed subjects were less likely to be classified as obese/overweight, OR 0.74 (95% CI 0.70,0.78). The US Surgeon-General reached the conclusion: “The first step in an obesity prevention program is to ensure that all mothers have the opportunity to breastfeed their infants, exclusively for six months and then continuing complimentary feeds are introduced. Infants who are not breastfed are 33% more likely become obese children.

Infants delivered by caesarean section are more likely to become obese and the most comprehensive systematic review and meta-analysis to date included 28 studies. The pooled risk
ratios for Caesarean section for obesity in the child compared with vaginal birth was 1.34 (CI 1.18–1.51). After adjustment for pre-pregnancy weight the RR was reduced to 1.29.

Antibiotic usage in the first year of life is associated with obesity. Bailey used a cohort of 68000 children in Philadelphia to conclude that repeated exposure to antibiotics in children under 2 years resulted in obesity rate ratio [RR], 1.11; 95% CI, 1.02-1.21 for .4 episodes). Similar results were found in a cohort of 12000 infants from Finland.

The use of infant formula has long been thought to contribute to obesity. The European study group based in Munich have shown that the effect of infant formula on the development of obesity is related to its higher protein content. When the protein content of formula is lowered to approach the levels in breastmilk the obesogenic effect is reduced. The effect of formula may be partly due to the use of infant feeding bottles that overcome the infants satiety and lead to overfeeding.

The main mechanisms proposed for the obese effects are the effect on the microbiome and of higher protein levels in formula on the IGF1 axis.

Our research in the Asia Pacific Region has shown that exclusive breastfeeding rates are less than optimal, formula use is already high in some countries and increasing and in many areas there are very high caesarean section rates. Intervention in these factors provides opportunity for reducing obesity rates.
Paradox In Team Work: Diabetic Educator Nursing Officers In Physician Dominant Medical Clinics

Manuj Weerasinghe
Manuj Weerasinghe; Deepani Siriwardhana
Faculty of Medicine, University of Colombo
Sri Lanka
manuj@commed.cmb.ac.lk

A special category named diabetic educator nurses (DENO) was introduced to Sri Lankan hospitals in 2009. They were supposed to assist physicians to enhance the health education for diabetic patients attending clinics and hospitals. Introduction of a new category of staff to a medical dominant healthcare system increased tension between two groups that were suppose to work in cooperation.

Objective of this study was to determine the working relationship of DENOs in hospital setting to optimize their performance. 51 DENOs from 28 hospitals participated in 5 focus group discussions covering ten districts of the country. Field visits were done to 19 hospitals. During the visits 76 interviews were conducted with DENOs, physicians, other supervising staff and patents to elicit the working environment and relationships.

Of the 51 DENOs participated in the study only 25 were fully released to do diabetic education in medical clinics. Other were partially released or not given opportunity to educate patients. Administrators and other staff were largely unaware on the duties and responsibilities of the DENOs. This resulted in under utilization of their capabilities. A proportion of medical officers felt DENOs trying to encroach their territory of clinical management. Some incompatibles of content used in DENO training with the methods used by the physicians on diabetic management led to misunderstanding. Some DENOs expected greater freedom to work on their own in diabetic education. This ignited resistance from some physicians which resulted in sidelining DENOs from diabetic education. A formal information system was not in place to track DENO activities. It prevented authorities taking timely interventions to optimize DENO performance.

Despite been a creative initiative to enhance diabetic education, non consideration of psycho social factors operating in the work setting at the inception, DENOs could not perform optimally in delivering services to patients.
Reproductive Health has special attention globally since the International Conference on Population and Development in Cairo, Egypt. One of the results of this conference was focusing on adolescent reproductive health. Population Reference Bureaus (2013) showed the number of adolescents (10-24 years old) about 1.809 billion (25% of total population in Asia, including Indonesia). It indicates that proportion of adolescent are high in the population of world, including Indonesia. Adolescence is an investment in the future, who will facilitate the achievement of Millenium Development Goal (MDGs). Adolescents premarital sexual behavior in Indonesia are worried, which have an impact on Unwanted Pregnancy, abortion, sexually transmitted infections (STD), HIV and AIDS. Previous studies have shown that parental monitoring can prevent to adolescent engaged risk behavior, including premarital sexual. Unfortunately, parental monitoring aspect is not clear yet. Therefore, this paper will discuss about parental monitoring aspects which based on research in Pontianak, Indonesia.

This paper aimed to explore the aspect of parental monitoring which can prevent and protect adolescents to engage in premarital sexual behavior (kissing, necking, petting, and intercourse) in Pontianak. Qualitative research and phenomenological approach were used in this research. The informants of this research were 12 adolescent (13-15 years old in Junior High School in Pontianak City), 11 of their mothers and 5 fathers. Informants were selected by purposive sampling, and strategy of maximum variation sampling was used. The criteria were: 1) adolescent live together with their parents; 2) marital status of their parents are married. Informant was chosen by maximum variation sampling (adolescent sexual behavior, parental education, parental employment). Content analysis was used to explore parental monitoring aspect.

Based on content analysis, there were 5 aspects of parental monitoring, The first aspect was adolescent-parents relationship. It consists of awareness, openness, and warmth. Parent-child relationship will be established if parents and adolescent have the same forming of caring perceptions. Adolescent will feel that their parents care if parents ask about activities and friends. Perceptions of adolescents about the parental caring, will have an impact on the attitudes and behavior of adolescents. Adolescence who feel ignored and neglected by their parents, they tend to be more likely to spend time outdoors with friends rather than in the house and do negative things (including risky sexual behavior).

The second aspect was parental monitoring behavior consisting of expectations, behavior control, and rules / restrictions. Parents’ expectations to adolescents is oe of parental monitoring behavior. Adolescent whose their parents expressed the hope, tend to try not disappointed their parents. Parental expectations to adolescents is important because it will make them to do their
parents expectation and stay away from negative things. In addition, parents’ expectations can be control in everyday behavior for teenagers.

The third aspect was parental knowledge consisting of whereabout, activity, and friends adolescents. There is double standard in parental monitoring, including parental knowledge. It can be seen from the knowledge of parents more aware to their girl than son. Almost all adolescent girls informants stated that their parents always want to know about the existence, and activity all of the times.

The fourth aspect was parents-adolescents communication consisting of communication about daily activities, sexuality, and problems. All of the parents in this research were still taboo to communicate regarding sexuality to their adolescent, and they didn’t know the way to deliver it. As a result, adolescents prefer to search the sexuality information by internet and their peers. Parent-adolescent communication is a protective factor in adolescent risk behavior. A good communication between parent and adolescent can make a comfortable feeling to tell all of information about their activities to their parents. In addition, open communication between parents and adolescents is positively associated with general measurement of parental monitoring. Therefore, open communication between parents and adolescents could be a protective factor to risky behavior. Instead, a poor communication could be a risk factor in adolescent risky behaviors (including unsafe sex).

The fifth aspect was psychological control consisting of the delivery of rules and expectations, and bring psychological attitudes (guilty, shame, and etc). Psychological control is an important aspect that influence adolescents behavior. The existence of it can be a consideration to do anything.

All of the construct of parental monitoring related each other. The most important thing is the disclosure adolescent to their parents. Moreover, there was double standards in the implementation of parental monitoring on adolescence, still taboo to talk about sexuality and mother did parental monitoring to adolescents more than father.
Patient Satisfaction At The Early Stage Of National Health Insurance (NHI) Implementation: A Comparative Study Before And After NHI Implementation At Nine Class A Public Hospital In Indonesia

Kamaluddin Latief
Center for Family Welfare, FPH UI
Indonesia
eskaning.arum@gmail.com

The implementation of the National Health Insurance (NHI)/Jaminan Kesehatan Nasional at the beginning of January 2014 signals an enormous change for the health system in Indonesia. NHI is compulsory for all Indonesians and will be the largest single-payer health insurance system in the world, covering approximately 250 million people when it is fully implemented in 2019. NHI encompasses all government insurance programs managed by the Social Insurance Board (BPJS) (i.e. Jamkesmas/Jampersal, Askes, Jamsostek, TNI/ Polri, and some of Jamkesda).

The impact of NHI implementation is already seen by the increasing number of BPJS patients in hospitals. Before NHI implementation, care for most patients was financed by local government insurance schemes, but after NHI implementation, NIH patient accounts for more than 50% of users and in some hospitals, NHI patients make up to 80-90% of the total patients.

The purpose of this study was to examine whether there is any difference in patient satisfaction before and after NHI implementation, and whether there are differences among the nine hospitals.

In 2011, USAID supported University Research, Co., LLC (URC) and Center for Family Welfare Faculty of Public Health Universitas Indonesia to begin a longitudinal study in nine Class A government-owned hospitals, called the Hospital Accreditation Process Impact Evaluation (HAPIE) study. HAPIE is being conducted in three phases: baseline (completed August 2013), mid-line (completed in 2014) and end line (data collection planned for January 2016).

Patient exit interviews were conducted in four inpatient wards (obstetric, pediatric, internal medicine and surgery) at each phase of data collection, aiming for a total sample of 1.080 interviews in each phase based on 30 interviews in each of the four wards in each of the nine hospitals. Patients were randomly selected; interviews were conducted after the patient was discharged to capture patients experiences with the care they received during their inpatient stay.

To understand the perspective of the provider, interviews were also conducted with the following informants: Chiefs of Medical Services, Finance Manager, Unit of Hospital Information System, and the Health Insurance Unit.

Patient satisfaction is measured as index made up of patient perception scores on several components such, as doctors competence, doctors communication, nurse/midwives competence, nursing care, patient involvement in the process of treatment, information received, and appearance of hospital facilities.
After controlling for other factors, including method of payment, patient satisfaction in all nine hospitals was lower in the period of after NHI implementation as compared to before its implementation. The difference varied among hospitals. When analyzed by component within the patient satisfaction categories, differences were observed in the magnitude of decrease in patient satisfaction: doctors communication declined by 10 percentage points, doctors competence by 16, nurses competence by 10 treatments provided by 9, and attention of medical staff by 15 percentage points.

Key informant interviews with hospital personnel provide some explanation for this decrease, identifying factors such as the large number of patients treated, limitations on drugs that can be provided, and limitations on medical procedures included in the BPJS package.

We conclude that implementation of the NHI scheme has not been accompanied by needed measures to strengthen the service delivery system. Achieving the full promise of Universal Health Coverage in Indonesia will require efforts to strengthen delivery systems.
Fall, one of the greatest concerns for the elderly population, especially those in long term or acute care facilities is the possibility of falls. Consistently the literature suggests that over half of elders in institutions and long term care facilities suffer a fall or multiple falls. The consequences of such falls may result in longer hospital stays, fractures, depression, anxiety, and death. The frequency of falls increases with age and frailty level. Older people who are living in institutions fall more often than those who are living in community. It is reported in the literature that disability, morbidity and mortality rates increase significantly with the occurrence of falls. The identification of the pattern of fall and its common influencing factors may help the relevant authorities to prevent such events in future.

To describe Pattern and Common influencing factors of fall and to describe the relationship between fall and Common influencing factors of fall in two months duration among elders living in a State run Elders Home in Northern Sri Lanka.

A Descriptive cross sectional study was conducted in a state run elders home in Kaithady Jaffna, Northern Sri Lanka during the period of January 2015- May 2015. One hundred and eighty two elders aged 60 and above were recruited for this study. Elders with diagnosed dementia or bed ridden were excluded. Data collection was conducted through interviewer administered questionnaire which had been prepared according to the specific objectives. In addition to that a record of fall register was maintained for two months during the study period and incidence of fall also assessed. Participants medical records were used to extract data related to past medical conditions. Cognitive status was assessed using Tamil translated Mini Mental State Examination. Data were analyzed as bivariate analysis using SPSS 21. Ethical clearance was obtained from Ethics Review Committee, University of Jaffna.

Mean age of the study participants was 73.76 years, with a median of 73 years. Most of the participants were above and equal to the age of 70 years (67.9%). Among the participants 62.4 %were male. Almost all the participants (99%) were Tamils. More than 4/5 of the participants (88%) were Hindus. About one third (34%) of participants had only five years of education.

Within the study population 53.21% were fallen in two months of period, and 80.9% of the elders who had fall also had recurrent falls within that period. More than ninety percent (91.4%) of the incident occurred during the day time and two fifth (41.3%) had it in living room and one third (34.5%) of elders experienced it at bathroom. Among the elders who experienced fall 22.5% were admitted to hospital for further management. Four people experienced hip fracture and two had upper limb fractures.
Elders aged 70 years and above had fewer falls (51.4%) in compare to elders aged 60-69 years (57.1%). Falls among females were high (58.3%) in compare to Males (50.0%). Those who had any chronic disease condition had higher chance of fall (55.9%) than those who without any chronic diseases (48.8%). These differences were statistically not significant (p>0.05). Incidence of fall among elders with normal cognitive status was 42.4% and for subnormal cognitive status was 57.9% and this difference was statistically significant (p=0.031).

The high incidence of falls among the institutionalized elderly reported in this study and the preventable and modifiable influencing factors indicate necessity and feasibility of their prevention.
Perception And Barriers Regarding Sports Participation Among Bilateral Lower Limb Amputees

Akalanka P. Hettihewa
Akalanka P. Hettihewa; Udesh D. Perera; Indika M. Karunathilake
Medical Education Development and Research Centre, Faculty of Medicine, University of Colombo, Sri Lanka
Sri Lanka
akalankauc89@gmail.com

Sri Lanka has a large number of lower limb amputees due to war and road-traffic accidents. Aim after an amputation is to bring the patient to an optimal physical, mental, social and economic efficiency. Studies indicate that participation of sports increase the self-esteem and psychological wellbeing of amputees resulting in a higher quality of life. Para-sports create an opportunity for people with different types of disabilities to participate and keep active within the community. They assist the amputee to meet his rehabilitation goals. However Sri Lankan studies regarding sports participation of amputees is not common.

Study aimed to identify the barriers wheelchair athletes face in sports participation and identify their perception regarding sports participation.

Study followed a cross sectional design, with the participation of the Sri Lanka National Wheelchair tennis team, 15 players participated at a response rate of 83.3%. A self-administered questionnaire was used to gather data regarding the players’ perception on how sports participation benefits them and what barriers they face in sports participation.

All participants felt that sports participation is helpful in managing strength and flexibility problems, improves joint functions and fitness. Out of 15, 13 felt that sports participation develop skills in other aspects of life, help to focus better in other areas of life and improves ability to care of themselves. The commonest barrier identified to sports participation was the unavailability of suitable transport with sufficient space for equipment when they are traveling for practice or tournaments, encountering unfamiliar environments, lack of wheelchair accessibility of sporting venues and the need for caretakers when traveling were also barriers.

Studies indicate that sports participation is essential in amputee rehabilitation and amputees themselves perceive it to be important. However Sri Lankan amputees face many challenges in sports participation. These barriers need to be addressed in order to increase amputee sports participation which will lead to better rehabilitation.
Perceptions Of Rural Malaysian Women Towards HPV DNA Self-Sampling For Cervical Cancer Screening

Wee Jie Tee

Wee Jie Tee; Sathesh Balasundram; Yiling SeeToh; Ying Shi Ooi; Shazard Amani Mohamed Zaffian; Aqtab Mazhar Alias; Mas Ayu Said; Marzuki Isahak; Nirmala Bhoo-Pathy

University of Malaya, Malaysia

While cervical cancer is one of the leading female malignancies in low- and middle-income countries, uptake of screening based on Pap-cytology in these settings remain suboptimal. HPV DNA self-sampling, a potential alternative to conventional Pap-cytology may offer the opportunity for increased cervical cancer screening uptake.

We determined the perceptions on HPV DNA self-sampling, and preference for cervical cancer screening strategy among rural Malaysian women.

A cross-sectional study was carried out using interviewer-administered questionnaire in women aged 20 to 64 (N=300) from four rural villages in the district of Kuantan in Pahang state, Malaysia. Perceptions on HPV DNA self-sampling and Pap-smear was assessed and compared in 4 domains mainly ease, embarrassment, discomfort and confidence.

Only 54% of participants had underwent Pap smear in the last 5 years while nearly 19% had never heard of pap smear. The perception on HPV DNA self-sampling was slightly more positive than of pap smear. Participants reported to be more embarrassed in undergoing a pap smear. However, both self-sampling and Pap smear were ranked equally in terms of ease, discomfort and level of confidence. While 42.5% of women would prefer to have self-sampling, 21% of women found both self-sampling and Pap smear to be equally acceptable as screening method for cervical cancer. Compared with primary and secondary education, women with tertiary education were strongly and independently associated with preference for self-sampling with odd ratio of 2.51 (95% CI 1.19 5.29).
Personal Attributes Of Teenage Pregnancy: Findings From A Rural Setting In Sri Lanka

Ishanka A. Talagala

Ishanka A. Talagala; Keerthi M. Kodithuwakku
Regional Director of Health Services- Ampara, Sri Lanka
Sri Lanka
drishanka@gmail.com

Teenage pregnancy causes various negative consequences for the mother and newborn, especially in rural settings.

This study was aimed to describe personal attributes of pregnant teenagers in a rural district in Sri Lanka.

A community-based, cross-sectional study was conducted among all teenagers (aged <20 years) registered for antenatal care in the Regional Director of Health Services division-Ampara, Sri Lanka (n=157) in 2013. Data were collected using an interviewer-administered questionnaire. Descriptive summary statistics were used for analysis.

Mean age of the pregnant teenagers was 18.2 (SD=0.85) years. Majority (82.8%, n=130) had studied up to grades 6-11 while they discontinued it mainly due to: failing GCE Ordinary Level examination (47.8%, n=75); not interested (16%, n=25) and financial problems (8.3%, n=13). Most (92.4%, n=145) had not received any vocational training. Majority (83.4%, n=131) were unemployed in the previous year, 31% (n=49) were from poor families and in 26% (n=41), either or both parents had not undergone formal education.

Mean age at menarche was 13 years (SD=1.6), with 90% (n=141) being sexually active in the next 2-6 years. Mean age at their first sexual intercourse was 17.5 years (SD=1.1) and of the partner was 22.3 (SD=2.8), it was after the marriage in 63% (n=99), and 3.2% (n=5) following sexual abuse. Marriage/cohabiting was initiated following an unplanned decision in 45.2% (n=71).

Only 35% (n=55) had planned the current pregnancy, majority based on spouses wish (41%, n=23). Of the rest (65%, n=102), 65% (n=66) had not used any contraception, following spouses opposition (22.4%, n=15). Among those on a method (35% n=13), 68.4% (n=9) had used OCP with 60.5% (n=5) incorrectly using it. Almost all never used emergency contraceptive pills (95%, n=149) and never considered abortion (98%, n=154).

Being school drop-outs, poor parental socio-economic and educational background and poor decision making on family planning characterize the teen pregnancies. Reproductive health programmes targeted to school drop-outs at community level is recommended.
Physical And Social Environment Associated With Physical Activity In The Urban Area Of Colombo, Sri Lanka

Shreenika De Silva Weliange
Shreenika De Silva Weliange; Dulitha Fernando; Jagath Gunathilake
University of Colombo
Sri Lanka
shreenika73@yahoo.co.uk

Physical inactivity contributes to 6% of deaths globally and is identified as the fourth leading risk factor for mortality due to NCDs. Physical activity (PA) can be achieved through ‘active living’ which is a way of life that integrates PA into daily routine. Evidence suggests that neighbourhood design features, are associated with PA, especially with leisure time and transport related activity.

The aim of this study was to assess neighbourhood design features associated with PA and to assess its relationship to leisure time and transported related activity.

A group of 960 adults aged 20-59 were selected using stratified multistage cluster sampling with probability proportionate to the size of adult population in the urban areas in the district of Colombo, Sri Lanka. PA was assessed using the validated long version of the international physical activity questionnaire and transport related and leisure time PA was calculated. The individuals were classified into ‘sufficient activity’ and ‘insufficient activity’ based on a cut off of 600 MET minutes of activity a week. Physical environment was assessed using the ‘physical and social environment scale’ which was developed and validated to assess the environment associated with PA in Sri Lanka. It measured residential density, land use diversity, infrastructure for walking, aesthetics and facilities for cycling, vehicular traffic safety, access and connectivity, recreational facilities for PA, safety, social cohesion and social acceptance of PA using 36 questions.

The sample consisted of 53.3% (n=513) females and 46.7% males. Majority (62.1%) were overweight or obese and 32.2% (n=309) had an education less than G.C.E ordinary level. Aesthetics and facilities for cycling, vehicular traffic safety and social acceptance of physical activity were perceived as being less conducive for physical activity in the urban area of Sri Lanka. The factors that were positively associated with sufficient physical activity with a significance of p<0.05 were aesthetics and facilities for cycling, recreational facilities for PA, type of residencies and land use diversity. Among the social aspects, social acceptance of physical activity was positively associated with physical activity. In conclusion, both physical and social environment were seen to have an influence on the leisure time and transport related PA behaviour. This calls for Multi-sector approach to make the environment friendlier towards “active living,” thus enhancing the health and well-being of the urban population of Sri Lanka.
Physical Condition Of Cafeteria As Risk Factor Of Escherichia Coli Contamination In Food And Beverages In Cafeteria Of University X In Indonesia, 2015

Lassie Fitria
Dewi Susanna; Zakianis; Yonne M Indrawani; Tris Eryando;
Lassie Fitria; Dwi Oktaviana; Fidyatun Khoiriyah
Environmental Health Department FKM UI Indonesia
lassie05@gmail.com

Based on Ministry of Health of Indonesia, one of important point to prevent the spread of E. coli beside behavior of food handler that is environmental condition included physical condition of cafeteria's kitchen. E coli and other pathogen live in every condition in every surface of tools and media. University X has cafeteria that was completed by kitchen and bathroom sink. Infrastructure of cafeteria is separate from main building of university. Cafeteria have already has management to control and manage food processing in kitchen.

Identification physical condition of kitchen will help to identify condition that support E coli and others pathogen grow and spread. Clean and save of Physical condition and infrastructure hygiene create condition with low of E coli and pathogen contaminant. Identification physical Condition as dominant risk factor of cafeteria related to E coli contamination. This study used cross sectional study. Data was collected by assess infrastructure or physical condition of cafeteria and identify bacterium E coli. There were 168 respondents and 168 food samples that were taken from 13 cafeterias in University. Physical condition was assessing by using questionnaire that has 17 points of infrastructure or physical condition based on Ministry of Health regulation. The laboratory analysis was performed in Environmental Health Laboratory Faculty of Public Health and E. coli contamination measured used Total Plate Count (TPC) method cultured in Methylene Blue Agar (MBA) and the result performed in cfu (colony forming unit). Data analysis was performed by SPSS

Most of food handlers in cafeteria in University X were female (56%) and most of them (60.1%) were low education (> Senor high school). There were 67.1% food handlers have not been educated about food hygiene and sanitation. Cross tabulation analysis presented that there were 6 physical condition that could be related to E coli contamination (P<0.05), there were general physical condition (P=0.000), Hygiene of Wall (0.000), hygiene of Floor (0.000), hygiene of roof (0.000), lighting (0.001) and type of lighting (0.000). Analysis Logistic Regression (95%CI) showed that Hygiene of roof (OR=4.5), Type of lighting (OR=3.5), Hygiene of floor (OR=2.9) were significantly contribute in E coli contamination.

Physical Condition of Cafeteria has 4.5 times risk of E coli contamination. University should take attention also to physical condition of cafeteria especially kitchen spot. Kitchen area will be dangerous area that increases e coli contamination. Wall, floor, roof and lighting should be in good or proper and hygiene condition. Good infrastructure will create good environment for food processing and it will be supporting sanitation and hygiene practice by food handler.
Pluralism In Treatment Seeking For Malaria

Dwi Linna Suswardany
Dwi Linna Suswardany; David Sibbritt; Sungwon Chang; Jon Adams
University of Technology Sydney
Australia
dwi.l.suswardany@student.uts.edu.au

The use of traditional medicine (TM) Jamu - is commonly embraced in Indonesia, including for malaria. TM has been reported as a factor associated with delays in seeking malaria treatment at conventional health centres. Delays in seeking care, diagnosis and correct treatment are all associated with fatal malaria. Despite, these circumstances, the factors that may influence TM use for malaria remain under-researched.

The purpose of this study was to investigate the prevalence and factors associated with the use of TM for malaria in Indonesia. The data source of this study was Indonesia National Basic Health Survey (Riskesdas) in 2010 which was a cross sectional survey. The samples were nationally representative of the civilian non-institutionalized household population across Indonesia. Samples were 12,226 household heads and household members aged 15 years and above that were interviewed using structured questionnaires. Analyses of all Riskesdas participants residing in moderate to high risk malaria-endemic provinces (Annual Parasite Incidence is more or equal than 1) was conducted following a multi-stage stratified probability sampling method. The bivariate association between the independent variables and the use of TM for treating malaria symptoms were assessed by chi-square test and two-sample t-test continued by logistic regression analysis (p<0.005).

A substantial number of people with malaria symptoms use TM (18.8%). The logistic regression model showed people whose main occupation are farmers are 1.26 times more likely to use TM for treating malaria than the unemployed (95% CI: 1.08, 1.47). People who drink jamu/herbal medicine every day (OR=3.75; 95% CI: 2.93, 4.79) and sometimes drink jamu (OR=3.23; 95% CI: 2.76, 3.79) are more likely to use TM for malaria than those who never drink jamu/herbs. People who used drugs for self-medication were less likely to utilize TM for treating malaria (OR=0.82; 95% CI: 0.72, 0.93), while people who did not know the availability of hospital nearby were more likely to use TM for malaria treatment than those who did not know the availability of hospitals nearby (OR=1.31; 95% CI: 1.10, 1.57). People diagnosed as having malaria in the last year, were 2.43 times more likely to use TM for malaria (95% CI: 1.60, 3.67) than those who had been diagnosed as having malaria in the last month. People who perceived themselves as having symptoms of malaria were less likely to use TM for malaria treatment (OR= 0.77; 95% CI: 0.61, 0.97) compared to those who diagnosed as having malaria in the last one month. Interestingly, people with no malaria were 1.46 (95% CI: 1.10, 1.93) times more likely to use TM for treating malaria symptoms than those diagnosed with malaria in last one month. This study suggests a lack of access to hospitals and accessible TM nearby may play important roles in explaining high use of TM for malaria in Indonesia. The significant use of TM by people diagnosed as having malaria in the last year shows the pluralism of treatment seeking for malaria. Those people may expand the choice of treating malaria by using TM as well as the mainstream antimalarial drug that is freely available in health centres.

Ede Surya Darmawan
Ede Surya Darmawan
Center for Health Administration and Policy Study (CHAMPS) Faculty of Public Health
Indonesia
edesurya@ui.ac.id

Implementation of a such big program called "Jaminan Kesehatan Nasional (INA-MediCare)" require strong and full support of policy at all levels: systemic, programmatic, organizational, and instruments. This article aimed at comparing the need and existing policy supporting to the implementation of JKN in Indonesia after 1 year of its implementation.

To identify policies needed in implementing Jaminan Kesehatan Nasional (INA-MediCare) toward Universal Health Coverage

Desk and literature review

Currently, several key policy is still missing in term of implementation of JKN i.e policy about health service facilities, role of local government, national guideline for medical services, and others. Implementation of JKN is quite slow at the beginning and became rush in 1 year before implementation. Basic policies and institutional empowerment were get little intervention during preparation stage of the implementation of JKN. To implement a good health program toward universal health coverage required adequate policy at all level such as system, programme, organization, and instrument level (Frenk 1986).

JKN need to be more supported by strong policy and followed by empowering institutional and program to achieve its per-determine goals.
Policy Implementation In The Reproductive Health Of Women Workers In Industries

Tris Eryando
Dewi Susanna; Tris Eryando; Martya Rahmaniarti; Dian Pratiwi
Universitas Indonesia
Indonesia
dsusanna2@yahoo.com

Women workers, especially in the reproductive age, are beginning to be involved in various industries. Protection of reproductive health for women workers stipulated in Law No. 13 of 2003 on Manpower. However, in reality, there are many female workers who have not received the protection of the reproductive health program.

This study aims to see the implementation of government policies in the protection of reproductive health, especially the women workers in industries.

This study was cross sectional research studies, with 100 women workers as respondents from 20 large-scale industries in Sukabumi, West Java, engaged in various industries. Descriptive analysis used in this study.

Most companies provide reproductive rights of women workers among others, menstrual leave with a 2-3 day long leave as much as 76%, labour is a fully funded 52%. Almost all companies provide maternity leave with full payment (92%). Companies that provide maternity leave of 95%, the remaining 5% of female workers due to the contract system. The whole company provides maternity leave and special treatment for pregnant women, by introducing a rotation system and work only during the day shift, and also reducing the workloads. However, family planning only provided limitedly using a specialized clinical family planning (38%), and only few of them were facilitated for baby breast feed and nursing.
Political Economy Of Universal Health Insurance Processes In Vietnam

Doan Thi Thuy Duong  
Bui Thi Thu Ha; Duong Minh Duc; Doan Thi Thuy Duong; Le Minh Thi  
Hanoi School of Public Health  
Vietnam  
dtttd@hsph.edu.vn

In the last twenty years after the Doi Moi in 1986, Vietnam has achieved good health results similar to those in high and middle-income countries thank to several new policies to achieve universal health insurance (UHI). Due to the lack of information about the implementation and evaluation, we conducted a study to describe the policy process of health insurance policies from agenda setting to implementation and evaluation.

To describe the policy process of health insurance policies from agenda setting to implementation and evaluation

This is a cross sectional design and qualitative methods. A total of 54 key informants were involved in in-depth interviews in Ha Noi and Hai Duong province and 420 documents related to UHI (papers, policies, articles, assessments) were reviewed.

Health insurance in Vietnam was introduced in 1992. Since then, several UHI policies were developed. These processes are contingent and persistent to gradually expand target population, benefit package and reducing the financial risk for the users. It is gradually expanding the target groups and has reached the coverage of 64.9% (2011). Policy processes are taking the incremental with learning by doing approach. However, the government lays more emphasis on increasing coverage than service package and financial protection. There was limited involvement of Civil Society Organizations in all policy processes. The policies offers limited financial protection and has high out-of-pocket payment due to escalating costs of services and insufficient provider payment mechanism. Fragmentation of management and limited institutional capacity are also not easily solved.

Some lessons learned could be identified. First, Vietnam needs to mobilize the resources in a sustainable and viable ways to support the key target groups. Secondly, the country should take multiple approaches to reach universal coverage, including social health insurance, target subsidies and voluntary health insurance. Thirdly, UHI reform takes time and the most difficult population groups are yet to be covered.
Positive Deviance On Childhood Obesity: Is It Possible?

Rifda Wulansari
Rifda Wulansari; Kholis Ernawati; Fatmah; Ivonne M. Indrawani, SU
IKM Fakultas Kedokteran Universitas Yarsi
Indonesia
rifda.wulansari@yarsi.ac.id; rifda_ws@yahoo.co.id

Double burden of nutrition (malnutrition and excess nutrients) is a major problem in developing countries. Children who are obese have an increasing risk to remain obese or became obese in adulthood, which in turn will increase the risk of chronic disease such as diabetes and heart disease. Riskesdas in 2013, the prevalence of obesity in children age of 11.9%. Positive Deviance is a successful approach to decrease malnutrition that is based on the assumption that some solutions to community problems already exist in the community and just need to be found. Because with this approach promotes behavior change and empowers caregivers to take responsibility for nutritional rehabilitation of their children. The basic principles of positive deviance, it would need to be developed that concept could be applied in order to reduce the number of excess nutrients.

The goal was to determine whether the concept can be applied Positive deviance on childhood obesity. The method to be used is the literature of study on positive deviance studies on malnutrition and the possible application of the concept of positive deviance on childhood obesity.

Positive Deviance Hearth is a successful approach to decrease malnutrition. This approach is based on the assumption that some solutions to community problem already exist in the community and just need to be discovered. Because behavior change slowly, a large number of public health practitioners agree that the solutions discovered within a community are more likely to survive compared to solution from outside are brought into the community. Positive Deviance and Hearth process taps into local wisdom for successfully treating and preventing malnutrition and spreads that wisdom throughout the community (Core, 2004). Childhood obesity is a complex problem that, among others, relating to the quality of the food consumed by a person. Changes in diet into a fast food calories and fat is high, the time spent on eating, the first time the child received in the form of solid food intake, lack of physical activity, genetic factors, hormonal and environmental (Sjarif, 2002). Positive Deviance in malnutrition applied four step: (Core, 2004) a. feeding patterns; b. Parenting; c. hygiene practices; and d. Behavioral health services.

See the concept of Positive Deviance above, the stages of the activities undertaken and the problems of obesity it is very possible if the concept of positive deviance applied to obesity.
Measuring stature was usually carried out to monitor nutrition and growth in children, but sometimes can't be done directly on certain conditions.

The purpose of this study was to develop prediction models of children stature aged 6-9 years based on knee height and arm span. This study was held in Pondok Cina 03 Public Elementary School in March until May 2015 with total respondents 61 boys and 82 girls. The design of this study was cross-sectional with independent variables: knee height, arm span, age, and gender, and stature as the dependent variable.

The result of this study showed that there were a strong correlation between age and stature \( r = 0.622 \), and a perfect correlation between knee height and stature \( r = 0.949 \), and arm span with stature \( r = 0.884 \). Prediction models of stature which obtained in this study was: Stature (cm) = 31.354 + [2.417 x knee height (cm)] and Stature (cm) = 26.2 + [0.695 x arm span (cm)] + [0.123 x age (month)]. Knee height and arm span are good predictors, however the prediction model based on knee height is more accurate and easier to use than prediction model based on arm span.
Indonesia experienced rapid population aging. It is estimated that the elderly population in Indonesia is aging and its determinant becomes an important issue that should be explored as support information for policy makers in designing effective policies and interventions to improve the quality of life of the elderly in Indonesia.

The objective of this study was to obtain predictive models of successful aging in the elderly in Indonesia. This study used a retrospective cohort study design using the data IFLS (Indonesian Family Life Survey) by following people for seven years, namely at the point of measurement time survey IFLS 2000 and 2007. The amount of the sample is 2,344 elderly (53 years). Multiple logistic regression analysis is used to derive predictive models of successful aging.

The rate of successful aging was 9.5% among elderly, and the rate for males was higher than that for females. Logistic regression analysis suggested that seven variables include individual factors (age, gender, education, physical activity and waist circumference) and environmental factors (level of expenditure, vegetable and healthy fund program participation) related to successful aging. Older age, male gender, elderly with higher education, physically active, elderly with no risk of waist circumference, higher level of vegetable expenditure, and participate in the healthy fund program were favorable factors for successful aging. Implications of the results of research on policy in the form of the three main pillars that determine successful aging, namely participation, health and social security. In addition to the three pillars, gender is also an important determinant of successful aging. Therefore, gender equality need to be considered in any policy pillars.
Predictors For Students' Smoking Intention For Future Cigarettes Consumption Among High School Students In Mataram, West Nusa Tenggara Indonesia

Heribertus Rinto Wibowo
Heribertus Rinto Wibowo; Dr Linda Portsmouth
Curtin University Western Australia
Indonesia/Australia
heribertus.wibowo@outlook.com

Tobacco smoking remains a significant health issue in Indonesia particularly among Indonesian young people. In 2014, Indonesia introduced Graphic Health Warnings (GHWs) on cigarette packs to increase awareness of the health consequences of tobacco smoking and to reduce the prevalence of tobacco smoking.

This study aimed to determine the predictors for students intention for future cigarette consumption. A cross sectional survey was conducted approximately 6 months after the introduction the GHWs on cigarette packs from January to February 2015 in five high schools in Mataram, West Nusa Tenggara, Indonesia. A total of 582 students in grades 10-12 were invited to join the survey and 502 responded. Chi square and logistic regression analyses were undertaken.

This study revealed that a high proportion of students (84.0%) reported that they do not intend to be a smoker next year. Most (93.4%) of the non-smokers intended to continue as non-smokers next year. Of those who smoke currently (n = 61), 45.9% reported that they intend to be a smoker next year (i.e. they are not planning on quitting), 37.7% are unsure about quitting while 16.4% intend to quit smoking. Notably, 4.6% of non-smokers predict they will be smoking by next year. Being male, a current smoker, disagreement with the belief: Smoking can harm others; and belief that GHWs are ineffective were associated with intention to smoke this time next year after adjusting for demographic variables. Living with a smoker and having friends who smoke are also significant contributing factors to students smoking intention in the next year. The findings also revealed that talking about GHWs is positively associated with lower smoking intention among students. This study also suggests that providing information of health effects of smoking in the form of GHWs on cigarette packs contributes to the adolescents decision making process on the smoking behaviour and may have potential to reduce adolescents smoking.
Preparedness For Birth And Related Emergencies Among Pregnant Women Attending Antenatal Clinics At A Medical Office Of Health Area (MOH), Sri Lanka

Vindya Kumarapeli
Chithramali Rodrigo; Vindya Kumarapeli
Ministry of Health
Sri Lanka
vindyalk@yahoo.com

Though developments in the field of health have significantly reduced the burden faced by Sri Lankan pregnant women, pregnancy associated emergency situations need prior anticipation and preparation. ‘Birth Preparedness and Complication Readiness’ (BPCR) promotes making arrangements to face expected as well as unexpected events.

The study aimed to assess BPCR and associated factors among pregnant women attending antenatal clinics (ANCs) in a MOH area, Sri Lanka. A descriptive cross-sectional study was carried out, among a random sample of 280 third trimester pregnant women, attending ANCs in MOH area Padukka, Western Province, Sri Lanka. Data were collected using a pre-tested interviewer administered questionnaire by trained data collectors. Satisfactory BPCR defined: accomplished ≥6 of 8: desired place of birth, closest facility, birth-related expenses, emergency expenses, person to accompany, arrangements to look after home, transport for birth, transport in emergency.

Response rate was 95.9% (n=269), median age 29 years (IQR; 25-32), 99.8% (n=268) were married, 35.4% (n=95) primiparous, 57.6% (n=255) had ≥1 child and 8.6% (n=23) had faced an obstetric complication.

Pregnancy was planned by 84.0 % (n=226), 81.0% (n=218) registered with PHM ≤8weeks, 58.4% (n=157) attended ≥5ANCs, 10.8% (n= 29) attended all ante-natal classes, 75.8% (n=204) discussed BPCR plan with health-care provider, 69.5% (n=187) discussed with spouse.

Only 75.5%, 73.0% and 47.2% had satisfactory knowledge on danger signs during pregnancy, labour and post-partum periods respectively; 75.0% (n=207) had favourable attitudes towards BPCR, 68.6% (n=185) had favourable perceptions on BPCR services.

BPCR was satisfactory in 86.2% (n=232), significantly (p<0.05).associated with planned pregnancy, registration ≤8weeks, attending ≥5ANCs, attending ≥1antenatal classes, discussing BPCR plan with healthcare provider, satisfactory knowledge on pregnancy danger signs, favourable attitudes, favourable perceptions. A high proportion of pregnant women had accomplished satisfactory BPCR but attitudes and perceptions on BPCR services need further improvement.
Prevalence And Associated Factors Of Mild Cognitive Impairment In Older People Attending Community Health Clinics In Kuala Lumpur

Alexander Lourdes Samy
Alexander Lourdes Samy; Wah-Yun Low; Ee Ming Khoo; Saroja Krishnaswamy
University of Malaya, Kuala Lumpur, Malaysia
Malaysia
alexander.lourdes@yahoo.com

The prevalence of Mild Cognitive Impairment (MCI) among older people in clinic-based population ranged between 10-20%. Various factors shown to be associated with MCI included socio-demography (age, gender, education level), co-morbidities, lifestyles (alcohol consumption, smoking, physical activities and mental activities).

This paper aims to determine the prevalence of MCI and its associated factors among older people attending community health clinics.

A cross-sectional study using random sampling was conducted at two community health clinics in Kuala Lumpur, Malaysia. Medical records of older people aged 60 years and above were screened and patients meeting the study criteria were invited for the study. Exclusion criteria were patients with documented history of dementia, psychosis, and foreigners. A structured questionnaire was used to obtain information on socio-demography, medical conditions, self-reported health status, subjective memory complaint and lifestyle behaviours (smoking status, alcohol consumption status, physical activity and involvement in spiritual activity). The Malay version of Montreal Cognitive Assessment (M-MoCA) was used to screen for cognitive impairment. It consists of 30-items with scores ranging from 0 to 30. A score below 23 suggests the presence of MCI. The Malay version of Geriatric Depression Scale (M-GDS) was used to screen for depression. A score of ≥8 suggests depression.

A total of 272 participants participated (response rate: 88.6%). Mean age was 67.8 ± 6.3 years and 71.7% were male. The Prevalence of MCI was 27.6% and depression was 5.5%. Significant associations were found between MCI and age (p<0.001), education level (p<0.001), monthly household income (p<0.05), self-reported health (p<0.05), subjective memory complaint (p<0.001) and frequency of physical activity (p<0.05). Logistic regression showed independent associated factors of MCI including increased age (70 years old and above (OR: 10.894; 95% CI 3.728-31.829). Education level shows that secondary school level (OR: 0.081; 95% CI 0.029-0.256) and tertiary education (OR: 0.006; 95% CI 0.001-0.032) are protective towards MCI. Participants with subjective memory complaint showed increased risk for MCI (OR: 2.594; 95% CI 1.009-6.669). Increasing age, higher education level and subjective memory complaint are associated factors for MCI. MCI is prevalent among older people. Thus, older people needed to be screened for cognitive impairment so that further investigations can be carried out to confirm its presence.
Prevalence And Characteristics Of Headache And Selected Musculoskeletal Problems Among School Teachers In An Urban Area In Sri Lanka

Dorji T
Dorji T; Sivagnanasundarampillai T; Thilakawardana BU; de Abrew A
Faculty of Medicine, University of Colombo
Sri Lanka
dorji.thinleydr@gmail.com

Musculoskeletal pain and headache are two common pains that anyone can experience. Sometimes it may be related to their occupation and thus, becomes an occupational health issue. This study investigated the prevalence and characteristics of headache, low back pain, leg pain and neck pain and associated socio-demographic factors and work related factors among school teachers in an urban area in Sri Lanka.

To determine the prevalence and characteristics of headache and selected musculoskeletal problems among school teachers in an urban area, and their relation with socio-demographic factors.

A descriptive cross-sectional study was conducted in three randomly selected schools in Kotahena School Division in Colombo. From the list of school teachers from those three schools, 210 were randomly selected of which 147 responded. Participants included permanent teachers who were teaching at the time of data collection and physical education teachers; the school principal and administrative teachers, trainee teachers and volunteer teachers were excluded. The study tool was a pre-tested, language validated self-administered questionnaire that contained four parts: first part collected the socio-demographic details and the subsequent parts were based on characteristics and work related factors on headache, low back pain, leg pain and neck pain.

Socio-demographic details (age, sex, marital status) were statistically tested for significance using SPSS analyser (trial version 20.0). The prevalence of headache was 55.8% (n = 82); leg, low back and neck pain was 51.0% (75), 32.7% (48) and 26.5% (39) respectively. Headache was common among females and mostly tension type with associated features. Respondents attributed headache to family, financial and physical problems in 72.1%, 61.4% and 74.3% respectively. It resulted in decrease of self-reported function (85.4%, n = 70). Headache (45.6%) and neck pain (58.3%) were more severe during exam paper correction. Headache (p = 0.001) and low back pain (p = 0.019) were more prevalent among subjects over 30 years of age while the average age of the sample population was 43.7 years. Low back pain (p = 0.030) and leg pain (p = 0.002) were higher in those with more than 5 years of teaching experience. The musculoskeletal complaints were mostly chronic in nature lasting from 3 to 6 months. Use of school furniture aggravated leg pain and low back pain. Leg pain worsened after walking and standing. Marital status, children, level of school were not associated with those complaints but the severity was less on holidays and school vacations.

The prevalence of headache was high, mostly tension type and commoner in females. The symptom reduction during holidays and school vacation suggest occupational association. Further research is recommended to assess the risk factors, thus preventive measures can be planned.
Prevalence And Determinants Of Metabolic Syndrome In Indonesian Adult And Elderly

Sudijanto Kamso
Sudijanto Kamso
Faculty of Public Health - Universitas Indonesia
Indonesia
sudijantokamso@yahoo.com

Cardiovascular disease has become the first cause of death in Indonesia. The highest morbidity is found in adult, and amongst cardiovascular disorders or diseases, the prevalence of hypertension is the highest. Many studies of the relationship between nutritional factors and hypertension have been conducted, especially with reference to the metabolic syndrome, but studies to understand determinants of metabolic syndrome in adult and elderly group are lacking. There is an urgent need to gather information about various metabolic syndrome risk factors in Indonesian adult and elderly, which will allow policymakers to provide appropriate intervention programs.

The primary purpose of this study was to investigate the prevalence of metabolic syndrome and the association between body mass index, physical activity and socio demographic factors with metabolic syndrome among adult and elderly in Indonesia.

A Basic Health Research study was undertaken in Indonesia in 2013 by National Institute of Health Research using multistage random sampling, total sample was 33,294 from all provinces in Indonesia. Data were collected through interview using structured questionnaires, anthropometric measurements, biochemical blood analysis, and blood pressure measurements. Multiple logistic regression analysis were performed to assess the association between body mass index, physical activity, socio demographic and metabolic syndrome.

Data analysis from National Basic Health Survey 2013 resulted that prevalence of metabolic syndrome in Indonesia is quite high (22.8%), prevalence in women (27.5%) is higher than in men (16.5%).

Prevalence in adults is also high (22%) although prevalence in the elderly is still higher (27.7%). Risk factors of metabolic syndrome resulting from data analysis show that risk of elderly having metabolic syndrome is 1.5 times higher than adult, higher education has less risk compared to lower education, obesity has 10 times higher than normoweight, women has 1.3 times higher than men and less moderate physical activity has 1.3 times higher risk.
In Sri Lankan context achievements have been particularly impressive in the health of women and girls who have substantially lower mortality levels than males. This is self-evident with less life expectancy and more non communicable diseases among men. Risk factors for most non communicable diseases (NCDs) are also higher among men compared to women.

To describe the prevalence of alcohol, drug and other unhealthy behavior patterns and associated factors among men in 35-50 year age group in a district in Sri Lanka. In order to describe the prevalence of selected unhealthy behaviors and their associated factors, a community survey was conducted in Kalutara district among a sample of 646 men from urban, rural and estate areas using multistage cluster sampling technique. The tool used was an interviewer administered questionnaire. Selected unhealthy behaviors and certain associated factors were described using Chi Square test and binary logistic regression.

Results revealed that the prevalence of current alcohol consumption to be 46.9%. Following binary logistic regression significant associations could be observed at p < 0.05 for sector (reference sector - urban), level of education (reference level of education above O/L), monthly income (reference level those with a monthly income of more than Rs 25,000) with 95% confidence interval values above 1. The prevalence of current smokers was 33.9%. Significant associations could be observed at p < 0.05 for sector (highest in estate sector), ethnicity (highest among Tamils), religion (highest among Hindus), education (highest among those educated up to grade 5), employment and nature of employment (highest among those employed permanently) with current smoking. The survey showed the prevalence of illegal drug abuse to be 2.3%. It was also revealed that 84.4% of the men are currently consuming either one or more foods at unhealthy levels. Among those live in urban areas about 3/5 of the men consume processed meat at unhealthy levels. Prevalence of deliberate self harm was 4.2% with the highest percentage of men who have attempted deliberate self-harm being reported from rural areas (4.9%). The highest percentage of men who attempted deliberate self-harm during last one year belongs to those who possess a diploma or a degree. It is likely that more education opportunities may reduce the prevalence of alcohol and smoking. According to the findings of the community survey, illegal drug abuse is commonest among poor unemployed men living in rural areas. The number of men who had angry behavior with members of the family have been more prone to angry behavior with people at work place. Deliberate self harm has been relatively commoner among those men with higher education and among professionals. Therefore it can be concluded that though behaviors such as alcohol and smoking could be reduced by providing a better education at school, having a better education per se has not been adequate to reduce the prevalence of behaviors such as deliberate self harm.
Complementary and alternative medicine (CAM) use has increased worldwide, with breast cancer patients being more likely to use CAM compared with any other cancer patients as they believe that the use of CAM can improve their quality of life. However, little is known on CAM use during the initial period of diagnosis.

The aim of this study is to determine the prevalence of CAM use by breast cancer patients before seeking any conventional treatment. A cross-sectional study was conducted. We interviewed 400 newly diagnosed breast cancer patients who are currently undergoing treatment at University Malaya Medical Centre (UMMC).

Among the 400 patients, 139 (34.8%) of the patients were identified as CAM users. Nutritional/dietary supplements (n=107) are the most commonly used CAM therapies, followed by spiritual (n=40) and traditional Chinese medicine (n=32). Among the CAM users, Malays (43.9%) were more common, followed by Chinese (41.0%) and Indians (14.4%). At UMMC, younger people [Mean (SD): 54.1(10.0)] were likely to use CAM compare to older people. Patients presented with more than three co-morbid, Malays, and those diagnosed with stage two were significantly associated with CAM use.
Prevalence Of Infections And Use Of Antibiotics Among Elderly Adults Admitted To A Tertiary Care Hospital In Malaysia

Basanta Kumar Mohanty
Basanta Kumar Mohanty; Chandrasekhar Giriyappanavar; Esther Gunaseli; Sandheep Sugathan
University Kuala Lumpur Royal College of Medicine Perak (UniKL RCMP), Ipoh, Perak, Malaysia
Malaysia
basanta@unikl.edu.my

There is a trend in the rise of elderly population worldwide. According to United Nations data, the world's population aged 60 years and over will increase to 21% in 2050 and in Malaysia, according to Department of Statistics, the population aged 65 years and over will reach 7.1% by 2021 and this will lead Malaysia to become an aged nation. Due to increase in life expectancy, geriatric illnesses including infections have become an increasingly important issue. Infections in older population are not only more frequent and more severe, they also have certain distinctive features as regards to their clinical presentation and treatment. Physiological and biochemical changes associated with age, malnutrition and immunosenescence are some of the important contributing factors for increased incidence of infections among elderly.

The present study was undertaken to evaluate different types of infections and use of various antibiotics among elderly patients aged 60 years and above admitted to the Medicine department of a tertiary care hospital in Malaysia and to correlate it with demographic variables like age, gender, race and other associated comorbidities.

This descriptive study was done based on the case records of 428 elderly patients aged 60 years and above, who were admitted to medicine ward of a referral tertiary care hospital during 2012. Systematic sampling method was used by selecting every fourth case record available for the study. The data collected was a part of ongoing research on comorbidities and use of drugs among hospitalized elderly during the same period of time. The study variables were demography, different types of infections and various antibiotics used to treat those infections and other associated comorbidities. Minimum sample size is calculated as 298 assuming that 35% of 2000 elderly patients will be admitted with infections with a precision of 5%. The study population was divided into 3 age groups i.e. 60 -69 years, 70 -79 years and those 80 years and above. The study was approved by the institutional ethics committee of University Kuala Lumpur Royal College of Medicine Perak (UniKL RCMP) and the necessary permission was obtained from the Director of the hospital prior to the collection of the data by a trained nurse. The data was analyzed using SPSS version 17 and Microsoft excel.

The total number of patients case records examined was 428, out of which 248 (57.9%) were males and 180 (42.1%) were females. Out of 428 patients, 185 (43.2%) were Malays, 164 (38.3%) were Chinese, 78 (18.2%) were Indians and only one belonged to other race.

There were 317(74.0%) elderly in the age group of 60-69 years and 63 (14.7%) patients in the age group of 70-79 years and total 48 (11.2%) patients in the age group of 80 and above. It was observed that majority of hospitalized elderly belonging to the age group of 60-69 years were Malays whereas
majority of hospitalized elderly belonging to the age group of 70-79 years and 80 years and above were Chinese.

Total number of 169 (39.5%) (95% CI 34.85 to 44.11) cases of Infection were retrieved from the case records out of which 97 (39.1%) (95% CI 33.03 to 45.17) were males and 72 (40%) (95% CI 32.84 to 47.16) were females. No significant difference was observed in proportion of infections between male and female elderly patients (P>0.05). In the age group of 60-69 years, 122 (38.5%) , in the age group of 70-79 years, 24 (38.1%) and in the age group of 80 years and above 23 (47.9%) elderly patients suffered from different infections. The eldest of the group i.e. the patients belonging to the age group of 80 and above had higher proportion of infections, though this was not statistically significant. Two most common types of infections noted were respiratory infections (64.4%) and Urinary tract infections (10.6%). Associated comorbidities were explored and it was found that hypertension, diabetes mellitus, hyperlipidimia, ischaemic heart disease, chronic kidney disease, bronchial asthma and COPD were other diseases associated in most of the cases of infections. Mean number of comorbidities observed was 2.91 (95% CI 2.69 to 3.13) and mean number of drugs used was 8.4 (95% CI 7.86 to 8.97).

The main groups of antibiotics used were beta lactam antibiotics, macrolides, and fluroquinolones either alone or in combination. Higher prevalence of infection was observed among hospitalized elderly especially among the very old people. Respiratory infection was the most common infection and hypertension and diabetes mellitus were found to be most common associated comorbidities. Most common antibiotics used were amoxicillin and clavulanic acid combination and azithromycin either alone or in combination.
Prevalence Of Mild Cognitive Impairment And Its Socio Demographic Correlates Among Elders In Northern Sri Lanka

Dr. P.A.D. Coonghe
Dr. P.A.D. Coonghe; Prof. Pushpa Fonseka; Dr. N. Sivarajah; Dr. A. Kesavaraj
Department of Community and Family Medicine, University of Jaffna, Sri Lanka
Sri Lanka
padcoonghe@yahoo.com

Population ageing is one of the leading demographic issues in most developing countries. This unprecedented growth of the elderly population is conspicuous in Sri Lanka's age structure. Mild Cognitive Impairment (MCI) is a new clinical entity used in identifying an intermediate stage between healthy ageing with slight cognitive changes and dementia. The prevalence of MCI among old age population is not accurately known, but community based studies estimate it to be around three times that of dementia. Risk factors, older age and lower level of education associated with cognitive decline and dementia has also been reported to be associated with MCI. The association with other risk factors is still not well established. Data on prevalence and its correlates of MCI is important in planning preventive and curative services for this condition.

to determine the prevalence of Mild Cognitive Impairment (MCI) and its socio demographic correlates among elders aged 65 and above in one of the Northern District of Sri Lanka.

The study included three components. First component was designed to adapt, translate and validate tools for screening MCI. Montreal Cognitive Assessment (MoCA) tool was used for these purposes. This MoCA was translated in Tamil language and then validated at Neurology Clinic at Teaching Hospital Jaffna. A cut off value of 24 out of 30 of MoCA was used to detect the MCI. Second component designed to develop and validated a tool for identifying socio demographic correlates of MCI in a community setting. Third component was a community based prevalence study to determine the prevalence of MCI and its socio demographic correlates. The diagnosis of MCI was based on the modified criteria of MCI of International Working Group on Mild Cognitive Impairment, 2004. The criteria consisted four components. Subjective cognitive complaint, Objective cognitive impairment, preserved activity of daily living and no dementia. The prevalence study was conducted among elder population aged 65 and above in Jaffna district. Community dwelling 998 elders participated in the study. Institutionalized elders and elders who were living alone were excluded from the study. Multistage cluster sampling was used to select samples. Interviewer administered questionnaire was used. Data analysis was done as univariant, bivariate and multi variant analysis using SPSS 21. Ethical approval for the study was obtained from Ethics Review Committee, University of Jaffna.

Two third of participants (67.1%, n=670) were in the age group of 65-74 years and 6.6 % (n= 66) were more than 85 years. Among the respondents around one third (33.2%, n=332) had studied for more than 10 years and among them more males are educated than females. Almost all participants were Sri Lankan Tamil (99.5%, n=994) and a majority was Hindu (85.6%, n=855). More than one fifth of the women who participated in the study were widows (21.5%, n=140). A majority (92.2%, n=920)
of these elders lived with one of their first degree relatives such as husband, kid or sibling. Two thirds (67.3%, n=672) of elders were economically dependent on their kids or relatives. More than three fourth (76.7%, n=438) of women were in that category. In this study, 27.5% participants had below the cut off score in MoCA testing and categorized as having objective cognitive impairment. Subjective cognitive impairment was reported among 36.5% of participants. Activities of daily living was normal among 95.7% and 97.6% were with absence of dementia. Based on the international criteria the prevalence of MCI was calculated as 20.9% (95% CI 18.4-23.4).

In Bivariate analysis the mean age of elderly with MCI was 73.3±7.3 years compared to 72.1±6.0 years among elders without MCI. This difference is statistically significant (t=2.5, Df=971, P=0.013). The mean educational years of elderly with MCI was 5.2±2.5 years compared to 8.4±3.4 years among elders without MCI. This difference is statistically significant (t=13.0, Df=971, P<0.001). Higher proportion of females had MCI (25%, n=139) compared to males (16.7%, n=70) and this difference is statistically significant (Chi-square =12.266, df=1, P<0.001). Religion and civil status did not have a significant relationship with cognitive status. A significant association was found between source of income and cognitive status (Chi-square=39.3, df=1, p<0.001). The proportion of elderly with a stable source of income having MCI was 9.3% (n=88) compared to 26.8% (n=181) of with an unstable source of income.

In Multivariate analysis Age above 75 years (OR 1.75, 95% CI 1.23-2.48), Education less than 10 years (OR 4.64 95% CI 2.70-7.98) and unstable income (OR 2.19, 95% CI 1.36-3.52) were found to be significant socio-demographic and economical factors of MCI. Sex, religion, civil status, cohabitants and lifetime occupational status were not identified to have statistically significant relationship with MCI.

The prevalence of MCI among elderly in Jaffna district, Sri Lanka is relatively high and several socio-demographic correlates have an influence on it. Community based preventive activities need to be implemented to control the condition.
Family Planning (FP) use is influenced by husbands. In Sri Lankan context men are excluded from FP programmes and issues related to FP have not been studied among the employees of armed forces. Therefore contraceptive use can be improved through involvement of the male partner.

To describe Prevalence, knowledge, practice and associated factors of family planning among married male navy personnel at a Naval Base in Southern Sri Lanka.

Descriptive cross sectional study in occupational setting was conducted among 424 married male Navy Personnel by simple random sampling method using pretested self-administered questionnaire.

Knowledge assessment done by a composite score comprising of 50 knowledge related questions. Good knowledge was taken as above 60%.

The response rate was 100%. Of the study participants, prevalence of FP was 59%(n=250) while 52.2%(n=220) were modern method users. The commonest method was condoms 16.3%(n=69) followed by oral pills 12.3%(n=52).

Overall good knowledge was reported by 17% of the subjects(n=72). Knowledge by method showed 85%(n=61) having a good knowledge on condoms while 57%(n=41) on emergency contraception. Percentage of respondents with good knowledge on all other methods was low, including IUD 39%(n=28), pills 24%(n=17), injectables 18%(n=13) and permanent sterilization 16%(n=12) respectively. Thirty six per cent(n=26) had good knowledge on traditional methods.

Nearly 73%(n=309) of couples had ever used a regular contraceptive method. Condoms 34.4%(n=146) and pills 31.8%(n=135) were the commonly used methods. Emergency contraceptives were ever used by 10.4%(n=44) of the population.

There was a significant association between the knowledge of the study subjects and the ever use of family planning among them (p<0.001).

National prevalence data for the region for 2014 was 67%. Knowledge on FP methods is inadequate in the study population while the current use was around 60%. More targeted programmes on FP should be implemented among the male population in their own occupational settings.
Primary Health Care Centre Management Of Emergency Obstetric And Neonatal Complications: A Case Study In Four Districts Of East Nusa Tenggara Province, Indonesia

Idawati Trisno
Idawati Trisno; Irene K.L.A. Davidz
Australia Indonesia Partnership for Maternal Neonatal Health
Indonesia
dr.ida70@gmail.com

East Nusa Tenggara is a poor remote province in eastern Indonesia, where some sub-district Health Centres (HC) have been upgraded to provide Basic Emergency Obstetric and Neonatal Care (BEONC), to reduce maternal and neonatal mortality

This study aimed to identify which complications the upgraded HC managed themselves, whether they're managed according to standard; which cases were referred, and why. Study methodology consisted of patient records examination and interview with health staff. Twenty cases with maternal complications and 10 cases with neonatal complications were audited from list of complications recorded in register book during the 4 weeks prior to the visit in HC. Eight HC were selected from four Districts, giving total sample of 160 maternal complications and 80 neonatal complications

Of the maternal complications, 29% occurred during pregnancy, and 71% at time of delivery. However, only 37% were managed in HC, of whom 70% were managed appropriately; while 63% were referred to District Hospital, with 52% receiving appropriate treatment prior to referral. Postpartum haemorrhage, incomplete abortion and breech presentation were the main complications treated by the HC, while cases of pre-eclampsia and prolonged labour were mainly referred to hospital.

Of the neonatal complications, 60% were managed in HC and 40% were referred. Of those managed by the HC, 79% were managed appropriately, while 53% of the referred cases were treated appropriately prior to transfer. Asphyxia and low birth weight were the main complications treated by the HC, while neonates with suspected infection were mainly referred to hospital.

More detailed analysis found that for the most part, mild complications were being managed at the HCs, with more severe cases being referred to hospital. Results of interviews revealed that most cases that could not be managed appropriately were the result of unavailability of equipment, oxygen, emergency drugs, and lack of competent health personnel. The study found the need to continue investment in building HC's capacity to provide BEONC in NTT. There is a need to improve pre-referral treatment and stabilization for mothers and babies at all HCs. In terms of management of obstetric complications, more attention needs to be given to the management of pre-eclampsia, premature rupture of membranes and prolonged labor as these conditions were more likely to lead to adverse outcomes of the pregnancy, such as low birth weight, stillbirth or neonatal death. Further training and regular replenishment of supplies and equipment would enable HCs to improve their management of complications. Effective supervision is recommended to ensure those.
Prokesima As Health Acceleration Effort Of Pregnant Women

Shrimarti Rukmini Devy

Universitas Airlangga
Indonesia
s_r_devy@yahoo.co.id

Women health problems, especially pregnant women remains a priority in Indonesia. Health promotion is one of the health sector development policy that is used to anticipate that problem. PROKESIMA is a collaborative activity between health education and productive economic activities such as knitting for pregnant women.

The team wanted to implement PROKESIMA as an appropriate model of health promotion for pregnant women through this research.

This activity is an operational research which conducted for solve the problems that occur in the community. The location for this research in Rapa Village which is located in Puskesmas Omben, District Omben, Sampang, Madura, East Java. The sampling technique used was purposive with the specified inclusion criteria. The population in these activities were pregnant mothers who elected to KIM through analysis community process. This activity plan will be implemented for 3 years. In the first year, it will be done on one area of the village, then the activity will be repeated in the second and third years with different village.

Based on the research result, shows that the pretest and post test results of each pregnant woman is fluctuated, which is increasing and decreasing in value. It is caused by several factors: pregnant women still in the condition of adaptation to the groups activities, there is exhaustion felt by pregnant women because already in the third trimester and diversity of midwives (3 midwives) communication skills at present the material. In addition, pregnant women, residents and cadres enthusiastically when following the knitting activities during the program. It can be concluded that a class of pregnant women can be done well although there are delayed times because of the village activities. Pregnant women who attend at the beginning of classes are 10 people and dropped to 8 people because 2 of them were giving birth.
Burnout, depression and stress at work is not merely affecting the workers quality of life but also putting the organization at risk of poor performance. This psychological ill-health is highly influenced by human-work environment interaction. This interaction can possibly explained by a relatively new theory called the Psychosocial Safety Climate (PSC) which examine workers perceptions towards the workplace climate that been created by their senior co-workers or managers.

The aim of this current study was to validate and assess the reliability of a questionnaire called the PSC-12 scale.

A sample of 50 primary care health-workers from a public health clinic was enrolled in the study conducted between June 2014 and July 2014. The questionnaire was first translated (back-to-back) from English to Malay and vice versa by 2 professional translators. Evaluation of face validation and content validation were done among 15 healthcare personnel and 2 specialists who are experts in Occupational Health and Safety as well as Industrial and Organizational Psychology. The clarity and plenitude / representativeness of the questionnaire regarding workers perceptions on the psychosocial elements of their workplace were assessed at this stage of validation. Internal consistency and reliability of the questionnaire were studied among 35 healthcare personnel from a different public health clinic with a test re-test carried out 1 week apart.

The items in PSC-12 scales questionnaire were easily understood and found to be representative of what it was meant to measure. Cronbach Alpha Coefficient of > 0.8 demonstrated a high internal consistency in the PSC-12 scale questionnaire sub-scales. An acceptable and satisfactory reliability of each sub-scale was identified through a high intra-class correlation index (ICC of 0.73).

The Psychosocial Safety Climate questionnaire is valid with good reliability among healthcare workers.
Psychosocial Adaptation And Influence Of Family Support On It In Type II Diabetes Mellitus Patients Attending Medical Clinic, Teaching Hospital, Jaffna, Northern Sri Lanka

R.Surenthirakumaran
R.Hamzathwany; S.Tharani; R.Surenthirakumaran; S.Sivansuthan
Faculty of Medicine, University of Jaffna
Sri Lanka
surenthirakumaran@gmail.com

Diabetes mellitus requires life-long treatment and monitoring and Living with diabetes mellitus has been described as a dynamic personal transitional adaptation, based on the perceived experience of the illness and management of the self.

To assess the Psychosocial adaptation and influence of family support on it in Type II Diabetes mellitus patients attending medical clinic, Teaching hospital, Jaffna. Cross sectional descriptive study involving 409 type 2 diabetes mellitus patients attending medical clinic, Teaching Hospital Jaffna. Interviewer administered questionnaire was used to collect data. Sample size (n): n = Z²p(1-p)/d²

Z= Critical value of specified confidence, here taken as 95% = 1.96


d= Tolerable error taken as 5% and, n= 1.96² x 0.41(1-0.41)/0.05² = 372 and taking 10% non-responders, the sample size would be (n) = 409 patients attending medical clinics in Teaching Hospital Jaffna.

The expected population during the sample collection period of 2 months is nearly 12000. Calculated sample size of the study is 409. According to systematic random sampling

K = 12000/409=29. Every 29th patient would be chosen.

Data analysis was done using SPSS 22 statistical software. The results were expressed in percentages. Data were presented using descriptive statistics of mean, standard deviation, percentages and were presented in figures and tables. Chi-square test and p value were used. A total of 409,256 (62.6%) females. The 69.9% of the samples are aged between 51 to 70(Mean 61). The age range is 31 to 83. 296 (72.4%) live in a nuclear family. The mean family income is Rs.26178.68% has satisfactory psychosocial adaptation and 32 % not satisfactory psychosocial adaptation. (92.9%) receive family support on taking drugs on time. (70%) said that their family members never encourage them to do exercise and they never join with them for exercise. 79.5% said their family members plan the activities that will fit into their self-care management.

Majority of the patients' family suggest things on taking drugs on time. When the family members suggest at least once a day the psychosocial adaptation was satisfactory in 63.3%. This is statistically significant. (p<0.05)
Most of the patients’ family members buy things that containing sugar to carry with them in case of a hypoglycemic reaction twice a month. Among them 75.1% of the patients have satisfactory psychosocial adaptation. This result is statistically very significant at 0.001 levels. (p<0.001)

In our study there is no significant correlation between the family behavior regarding letting the patient sleep late rather than getting up to take their drug and psychosocial adaptation. (p>0.05). When family members argue with them at least once a day the psychosocial adaptation was poor in the majority (52.4%). This is statistically significant. (p<0.001). Psychosocial adaptation was satisfactory in majority of the patients (68%). Family support is poor in drug compliance and exercise. There was significant influence of family support regarding diet, drug compliance, glucose measurements, exercise and general health practices.
Public Health Emergency/Disaster Preparedness And Response To Chemical Incidents

Fatma Lestari
Fatma Lestari; Budi Hartono; Yuni Kusminanti
Universitas Indonesia
Indonesia
fatmalestari9@gmail.com

Emergencies / Disaster related to chemical incidents emergencies/disaster may occur anywhere and at any time, including at Universities. These may result in serious short- and long-term public health consequences. It is important that Public Health Emergency /Disaster Preparedness and Response to chemical incidents is planned before the incidents occur. Universities played important and wide-ranging roles: education to the public in response to chemical incidents, public communication, contamination monitoring, epidemiological investigations, laboratory analysis, and monitoring individual and environmental health during chemical incidents.

This paper propose a structured framework and method for public to response in chemical incidents. Training and exercise which started from universities setting is modelled before it can be implemented in the public area.

Methodology used in this study is document review, observation and system development. Document review including policy towards emergency /disaster emergency preparedness and response, procedures, training and other relevant documents. Observation is conducted to observe the equipment, exercises, and internal capacity at the universities in responding to chemical incidents. System development is development of a system emergency/disaster preparedness and response to chemical incidents including identifying potential chemical incidents, risk assessment, risk mitigation and control.

Result suggested that emergency/disaster preparedness and response procedures, exercises and internal capacity plays important role of public health emergency / disaster preparedness and response to chemical incidents.
Pulmonary Dysfunction Due To Chromium Exposure (Study On Tannery Worker In The Sukaregang Garut District, West Java, 2015)

Rico Kurniawan
Rico Kurniawan; Bambang Wispriyono; Budi Hartono
Department of Environmental Health, FKM UI
Indonesia
rcokurniawan@gmail.com

Tannery workers have been potentially exposed to various air pollutants, such as chromium. Exposure of chromium can affect health status, such as shortness of breath, cough, decreased lung function, and lung cancer.

To determine the relation between chromium concentration in the workplace and worker’s pulmonary dysfunction

This study used a cross-sectional design on 61 people working at tanneries in Sukaregang, Garut district. Lung function was measured by spirometry. Low volume of sampling methods was used to measure the chromium in the air and analyzed by using atomic absorption spectrophotometer (AAS).

The concentration of total chromium in the workplace ranged from 3.94-11.79 μg/m3, while most of worker’s pulmonary function still in normal condition. Multivariate analysis showed that length of exposure and chromium concentration increases the risk of pulmonary dysfunction in tannery workers, (p 0.024 95% CI 0.068-0.830). controlling the variables by length of exposure showed that tannery workers who expose to higher concentration of chromium, have more risk to get pulmonary dysfunction.
Quality Of Sleep During Second And Third Trimester Pregnant Women In Northern Sri Lanka

P.A.D.Coonghe
S.Neelambari; A.L.M Safriz; P.A.D.Coonghe; K.Sivapalan
Department of Community and Family Medicine, University of Jaffna
Sri Lanka
padcoonghe@yahoo.com

Sleep plays a vital role in good health and well-being throughout life. Getting enough quality sleep at the right times can help to protect our mental health, physical health and quality of life. Sleep helps our brain work properly. Many studies show that sleep deficiency and bad sleep habits alter the activity in some parts of the brain. Sleep deficiency also can be linked to depression, suicide and risk-taking behavior. Ongoing sleep deficiency can be linked to an increased risk of heart disease, kidney disease, high blood pressure, diabetes, and stroke.

Normally women during pregnancy have poor sleep quality which has many reasons. Psycho emotional changes and hormonal changes occurring during pregnancy are common for all. Other factors vary with person to person which are socio economic status, environmental factors, health conditions etc. Many studies show that disturbed sleep may disrupt the normal immune processes and contribute to adverse pregnancy outcomes. Finding of this study will help to implement programmes to improve the quality of sleep among pregnant women.

To describe the quality of sleep in second and third trimester pregnant women who attended antenatal clinics in Nallur Medical Officer of Health (MOH) area in Northern Sri Lanka.

A clinic based descriptive cross sectional study was carried out in all antenatal clinics of the area during the period of March 2015 to May 2015. The study population was all registered pregnant mothers with a Period of Amenorrhea of 12 weeks and above. Mothers with known psychiatric conditions were excluded from the study. All the 215 pregnant mothers who fulfilled the eligible criteria were included in the study. Data collection was conducted in the antenatal clinics using interviewer administered questionnaire. Quality of sleep was assessed by Pittsburgh Sleep Quality Index created by university of Pittsburgh for assessing sleep quality, carrying the total marks 21 distributed for seven components of quality of sleep. Prior to the study pilot study was conducted in another MOH area. Descriptive and Bivariate analysis were done using SPSS 21. Ethical approval was obtained from Ethical Review Committee of University of Jaffna.

Among the total registered number of 215 mothers, 161 (74.8%) mothers responded. The age range of the study population is 19-42 years and the mean age of participants is 29.39 (Sd ±4.89). Second trimester pregnant mothers 52.8% (N-82) and third trimester pregnant mothers47.2% (N-76) were included in the study. Most of the mothers are with first and second parity.

Among the mothers 63.4 % sleeps for more than seven hours during night and 32.3% sleep for 5-7 hours. About 30% of mothers complained they had trouble sleeping during the past month because of they cannot breath comfortably. Another 75.8% complained because of have to get up to use bathroom had trouble sleep. Three fifth (59%) of mothers complained that cannot get sleep within
30 minutes after getting into the bed. And only about one third (35.5%) of mothers reported that during the past month they had a good quality of sleep.

In overall 33.5% of mothers scored a score of poor sleep quality in the Pittsburg Sleep Quality Index.

In Bivariate analysis almost equal number of second trimester (31.8%) and third trimester (35.5%) mothers had poor quality of sleep during the past month. Among the physiological factors frequent urination and day time sleeping are influencing on quality of sleep of the pregnant mothers (p<0.05). Abdominal distention, excessive eating and bad dreams are not influencing on quality of sleep.

None of the psychological issues like feel more work load, Family conflicts, Disturbance by children and Scared about delivery were statistically not significant relationship with the quality of the pregnant mother. Similarly none of the environmental factors such as Poor ventilation, Noises, Cooler or hotter room and Cleanliness room were not influencing the quality of sleep of the pregnant mothers.
Stunting is a linear growth failure caused by inadequate nutrition and health. Stunting is defined as height for age with Z-score below -2 SD according to international reference. Stunting is still a serious health problem in Indonesia with a prevalence of 37.2% in 2013. Stunting caused by poor maternal health and nutrition before and during pregnancy. LBW-IUGR is an important determinant of stunting in children as LBW represents poor maternal nutritional status before and during pregnancy.

The main objective of the study is to determine the relationship between LBW and stunting in children age 6-23 months in Indonesia after controlling by other potential confounding factors. This study is a cross-sectional study of Indonesia Basic Health Research data in 2013. Stunting is a dependent variable in this study, and LBW-IUGR as the main independent variable with Exclusive Breastfeeding, Immunization, Vitamin A Supplementation, Birth Length and Growth Chart Ownership as potential confounding factors.

The results of the analysis shows that LBW-IUGR are independently and significantly correlated with stunting in children age 6-23 months in Indonesia. Children born with LBW has an odds 1.5 (95% CI: 1.14 2.07) to be stunted compared to children with normal birth weight. Children born with LBW-IUGR caused by poor nutrition during pregnancy as one of the inadequate environmental effect such as poor social economy status are more likely to have similar environment as they growing up and during their next growth period. This caused the children to be more at risk to experienced the linear growth failure and having difficulty to follow normal child growth curve. This could be the result of inadequate nutrition during growth period, suboptimal immune system, and other adverse environmental condition that triggered the growth retardation during pregnancy and earlier after birth in the first place.
Relationship Between The Collision Avoidance Ability And Lifestyles Among The University Students

Ikuharu Morioka
Ikuharu Morioka; Kunihiko Miyamoto; Yasuko Namura; Nobuyuki Miyai; Kazuhisa Miyashita
Wakayama Medical University
Japan
moriokai@wakayama-med.ac.jp

We have developed the device which reproduces the collision scene with a rolling ball. This device has enabled us to measure the collision avoidance ability and to obtain indexes, such as a contact occurrence rate and a maximal avoidable speed. We have clarified the collision avoidance ability among school children and established the normal age variation curve of contact occurrence rate from 3 to 12 years old. However, it is still unclear the collision avoidance ability among university students.

In Japan, the physical strength of university students shows the decreasing tendency, corresponding to the decreased amount of physical exertion. There are some reports on the relationship between physical strength and fitness and eating habits of the university students. However, there is limited information on the relationship between the collision avoidance ability and fitness and eating habits of the university students.

In this study, we measured the collision avoidance ability among the university students, evaluated the indexes of collision avoidance ability and tried to clarify the relationship to lifestyles. These results will enable us to make the better health education in a university for preventing the collision.

The subjects were 11 boys and 56 girls of a nutritional university in Osaka Prefecture, Japan. The survey was done in December, 2014. This study was approved by the Ethical Committee of Osaka Aoyama University. Written informed consent was provided by all subjects.

The collision avoidance ability was measured by using our apparatus. By a self-administered questionnaire survey, we asked eating habits (eating habit, food taking, etc.), stress reactions (fatigue, headaches, and gastrointestinal pains), lifestyles (daily exercise, airtime of smartphones, bowel movement), and experience of exercise.

The subjects were divided into two groups by the mean value of the contact occurrence rate by each gender. They were: high contact occurrence rate group (low ability to avoid the ball) and low contact occurrence rate group (high ability to avoid the ball). The two high contact occurrence rate groups of both genders were combined into high contact group, and the two low contact occurrence rate groups of both genders were into low contact group.

The subjects were also divided into two groups by the mean value of the maximal avoidable speed in the same way as the contact occurrence rate. The two groups were high speed group (high ability to avoid the ball) and the low speed group (low ability to avoid the ball).
To compare the mean values, t-test was used. To compare the prevalence of the category, the chi-square test was used. A p value <0.05 was considered to indicate statistical significance.

The mean of the contact occurrence rate was 0.50 (standard deviation 0.13) in boys, 0.68 (0.16) in girls. The mean of the maximal avoidable speed was 4.16 (standard deviation 0.54) m/s in boys, 3.19 (0.74) m/s in girls. There was the significant difference in the two indexes between the both genders. Boys had the high ability to avoid the ball.

The mean of the contact occurrence rate of boys corresponded to the median at around 11 years in boys, and the one of girls corresponded to the median at around 9 years in girls. These results support the fact that the physical strength of the university students trends to decrease.

The high contact group was consisted of 41 subjects and the low contact group was consisted of 37 ones. Those who used a smartphone 4 hours and more in a day were 27.0% in the low contact group and 48.8% in the high contact group. There was a significant difference. The contact occurrence rate was related to the airtime of smartphones. They may show the sedentary lifestyle leads to the high contact occurrence rate.

The high speed group was consisted of 44 subjects and the low speed group was consisted of 34 ones. Those who ate fast food 4 times and more in a week were 32.4% in the low contact group and 15.9% in the high contact group. There was a significant difference. Eating fruits 2 times and more in a week (low speed group 58.8%, high speed group 77.3%) also showed significant difference. The maximal avoidable speed is related to the eating habits. This corresponds to the earlier reports that eating habits are important to keep physical strength of the university students.

Among the lifestyles, those who were enjoying physical activities were 32.4% in the low speed group and 47.7% in the high speed group. There was a significant difference. Regular bowel movement (low speed group 11.8%, high speed group 25.0%), and being aware of a health risk (low speed group 2.9%, high speed group 22.7%) also showed significant difference. The maximal avoidable speed is also related to the healthy lifestyles.

Among the stress reactions, there was no factor related to the contact occurrence rate and the maximal avoidable speed. Experience of exercise also showed no relationship to the contact occurrence rate and the maximal avoidable speed. As the conclusion, in order to prevent a collision, it may be also important to improve the eating habits and lifestyles among university students.
Relationship Between The Klotho Level In Preeclampsia And Maternal And Infantile Anthropometric As Well As Biochemical Indexes

Yueqiao Wang
Cuifang Fan; Yueqiao Wang; Suqing Wang
Wuhan University
China
elle529@126.com

Klotho (KL) is initially identified as a novel anti-aging gene in mice. In humans, KL is predominantly expressed in the kidney, parathyroid glands, adipose tissue and choroid plexus, but it is also distributed in other tissues such as prostate, small intestines, placenta and umbilical cord blood. KL plays a vital role in the development of age-related diseases in mammals such as acute kidney injury, chronic kidney disease, cardiovascular disease and cancer.

Preeclampsia (PE) is a leading cause of maternal and perinatal morbidity and mortality, which occurs mainly in women with first or multiple pregnancies. If PE remains untreated, it can develop towards eclampsia, producing maternal death. Additionally, severe PE leads to several pathophysiologic derangements such as systemic endothelial dysfunction, microangiopathy, the liver and the kidney injury, abnormal placentation, and exaggerated oxidative stress. However, there are few research exploring on the association between klotho and preeclampsia.

To investigate klotho concentration in maternal serum and umbilical cord serum, and analyze the correlation between klotho concentration and fetal birth weight. To explore the relationship between klotho concentration and renal function as well as oxidative stress. To extend the pathophysiological understanding and the prediction of the role klotho (KL) playing in preeclampsia (PE).

This cross-sectional study was conducted by School of Public Health, Wuhan University and Renmin Hospital, Wuhan University. 42 pregnant women (divided into 2 groups, 23 normal pregnancy and 19 severe PE) were enrolled consecutively in Renmin Hospital, Wuhan University from July to December, 2012. The basic information of all participants was collected by questionnaire and the primary biochemical parameters information were collected from clinical examination record. ELISA was used to test klotho concentration in maternal serum and umbilical cord serum. Prism 5.0 was used to analyze data and calculate the mean of data. To suggest the diagnosis accuracy of serum klotho to predict PE, the area under the receiver operating characteristic (AUC-ROC) curve was conducted.

The results of this study are (1) markedly higher umbilical cord serum klotho concentration compared with maternal serum klotho concentration and noticeable lower klotho concentration in women with PE; (2) ROC curve analysis revealed that serum klotho could detect PE with high accuracy (AUC=0.796) in negative relationship (98.9% negative predict value); (3) slight positive relationship between maternal serum klotho concentration and umbilical cord serum klotho concentration; (4) positive correlation between fetal birth weight klotho concentration especially in maternal serum; (5) negative relationship between maternal serum klotho concentration and MDA.
concentration in normal pregnancy but not in PE, while pregnancy with PE showed higher MDA concentration compared with normal group; (6) inverse relationship between maternal serum klotho concentration and SCr both in NC and PE, while women with PE had higher SCr than normal pregnancy; (7) inverse relationship between maternal serum Î±-klotho concentration and urea in PE but no correlation was found in NC, while higher urea concentration was showed in pregnancy with PE than normal pregnancy.

Our study suggests that KL could be a predictor as well as a contributor to PE. As we found, KL links to manifold dimensions of PE, which may extend better understanding of pathogenesis and mechanism of PE. Thus, further investigations are needed in intervention PE and promoting maternal and fetal health.
Reliability And Validity Of The Bahasa Malaysia Version Of The Organisational Police Stress Questionnaire

Retneswari Masilamani
Retneswari Masilamani; Awang Bulgiba; Karuthan Chinna; David Koh
UCSI University, Malaysia
Malaysia
retnes@gmail.com

In the last 20 years, the focus of police stressors has taken a shift towards organisational factors with documented evidence that organisational factors have taken the forefront in causing police stress. An English version of the Organisational Police Stress Questionnaire (PSQ-Org) was developed by McCreary & Thompson, 2006), to assess the organisational factors unique to the police force

This study aims to assess the reliability and validity of the Bahasa Malaysia (BM) version of the Organisational Police Stress Questionnaire

Forward (English to Bahasa Malaysia) and backward (Bahasa Malaysia to English) translation of the PSQ-Org was done to ascertain face validity of the questionnaire. Written consent was obtained from four hundred and fifty one (451) police officers from the Putrajaya District Police Headquarters, Kuantan District Police Headquarters and Terengganu Police Contingent who agreed to participate in this study and were administered the BM version of the PSQ-Org. Reliability of question was tested using Cronbachs Alpha while validity was assessed using factor analysis

The Cronbachs Alpha coefficient was 0.95. Exploratory factor analysis from 130 respondents identified 3 factors but were forced into one factor as the. Eigenvalues for factor 2 and 3 were close to 1 and together explained 55% of the total variance. Confirmatory factor analysis on 301 respondents showed the single factor with 20 items had a good fit with latent constructs (X2 (df) =454.80 (158), p <0.001, TLI = 0.919, CFI = 0.933, RMSEA= 0.079. The Composite Reliability and Average Variance Extracted values was more than 0.5 and 0.9 respectively indicating good construct reliability and good convergent validity. The study revealed that the single factor model with 20 items of the Bahasa Malaysia version of the PSQ-Org has a good fit and showed good psychometric values. It is a valid and reliable measurement to identify organisational stressors among Malaysian Police Force
Residual Tumor As Predictor Of 2-Year Disease Free Survival Post Treatment Of Stage II-IV Epithelial Ovarian Cancer Patients In Dharmais Cancer Hospital, Indonesia

Bambang Dwipoyono
Bambang Dwipoyono; Sudarto Ronoatmodjo; Ratna Djuwita; Heru Santoso; Nugroho Kampono
Cancer Dharmais Hospital
Indonesia
bdwipoyono@gmail.com

The high number of relapses and specifically mortalities to epithelial ovarian cancer patients has not undergone change for a decade. This fact persists as most patients present at severe stages, despite cytoreduction and administration of taxane based chemotherapy.

Evaluating the role of residual tumor as a robust predictor of disease free survival with 2 year post treatment surveillance of late stage ovarian cancer patients, along with the relationships of other clinical pathologic factors.

The design of this study is cohort retrospective of late stage epithelial ovarian cancer patients who receive complete treatment at Dharmais Cancer hospital from 2008-2012. Epidemiologic and clinical pathologic data were taken from medical records of these patients. Kaplan Meier and log rank test was performed to calculate the disease free survival. Cox regression analysis was used to assess the association of residual tumor and other risk factors with the risk of recurrence in 2 year follow-up.

Of 225 cases with epithelial ovarian cancer, only 65 fulfilled the inclusion and exclusion criteria. Median disease free survival of all subjects was larger than the 24 months follow-up time, and the overall 2-year disease free survival (DFS) rate was 50.7%. Cases with residual tumor of > 1 cm was associated with HR of 3.51 (95% CI 1.09-11.24, p = 0.035) for recurrence compared to those with 1 cm after controlling for type of chemotherapy, age at diagnosis and histopathology type (crude HR was 2.39, 95% CI: 0.96-5.95). Median disease free survival for cases with residual tumor of <= 1cm was more than 24 months compared to 9 months among those with residual tumor of > 1cm. The 2-year DFS rate was 57% among those with residual tumor of < 1 cm versus 27.4% among those with > 1 cm (p=0.049). Only 20 cases (specimens) underwent molecular tests.

Residual tumor was revealed to have significant role on 2-year epithelial ovarian cancer recurrence free. Types of chemotherapy, age at diagnosis, and types of histopathology were shown to be negative confounders for the risk of recurrence due to residual tumor.
Respiratory Health Of Plywood And Pencil Slate Workers In South Sumatera

Tan Malaka
Chairil Zaman ; Tan Malaka ; Ridhah Taqwa ; Hatta Dahlan ; Fatmawati
Sriwijaya University Palembang
Indonesia
tanmalaka2002@yahoo.com

Wood workers such as those who are working at Plywood and Pencil Slate industries are exposed to health risk in the form of wood dust. Industry of this type are basically labour intensive and are fast growing due to the availability of different kinds of woods as raw materials. It is therefore an important public health problem.

The objective of this study was to analyze the relationships between the exposure to wood dusts and respiratory health problems in the form of pulmonary function impairment and symptoms of respiratory diseases among workers of Plywood and Pencil Slate industries in the province of South Sumatra, Indonesia. The site of the study is PT. W, a manufacturer of Plywood, which is located at Indralaya, South Sumatra; and PT. X, a manufacturer of Pencil Slate, which is located at Musi Rawas, South Sumatra. The total number of workers recruited in this study was 180 people, 90 employees were taken from each the two companies. The measurement of the inhalable dust was performed using gravimetric techniques through personal and areal sampling. The variables of the study consist of the demographic characteristics of the workers such as age, gender, height, length of employment, smoking habit, spirometric values in the three parameters FVC, FEV1, FEV1/FVC. In addition to those, there were also the variables of respiratory disease symptoms such as cough and phlegm. If a subject has an indication of experiencing spirometric abnormalities, then a Skin Prick Test was performed. The determination of spirometric abnormalities is based on Indonesia nomogram.

It was found in this study that PT W. used wood of rubber trees (Hevea braziliensis) as raw material, while PT X. used wood of Pulai trees (Astonia Scolaris) as raw material. The measurable levels of wood dust were between 0.002 to 3,650 mg/m3. The spirometric abnormalities in the workers for the parameter of FVC was 7.3%, and that of FEV1 was 6.2%, and that of FEV1/FVC was 18.1%. The frequency of the workers who experienced cough was 7.3%, and the frequency of those who complained about sputum production was 8.5%. The values of spirometry of FVC, FEV1 and FEV1/FVC were significantly different by sex and company. Spirometric abnormalities on the parameters of FVC, FEV1, FEV1/FVC, were associated with levels of dust, duration of work, gender, smoking habits and the company. The frequency of respiratory symptoms such as cough and sputum, was associated with levels of dust and work duration. Further analysis showed that the duration of work and the levels of dust became good predictors of spirometric abnormalities and symptoms of respiratory diseases. The exposure to wood dust of Pulai trees (Astonia Scolaris) causes higher frequency of the respiratory health problems and allergic reactions than that of the wood dust of the Rubber trees (Hevea Braziliensis). It was concluded that the exposure to wood dusts of Rubber tree and Pulai were associated with the respiratory health problems of the workers. The wood of Pulai tree causes a higher risk of allergic-based respiratory health problems.
Review Of Diazinon Effects To Human, Other Mammals, And Environment

Budiyono
Budiyono; Bambang Wispriyono
Faculty of Public Health, Universitas Indonesia
Indonesia
budiyonopati@gmail.com

Diazinon pesticides are still registered and used in Indonesia such as Diazinon 10 GR, diazinon 600 EC, Prozinon 600 EC dan Sidazinon 600 EC. Some countries such as United States and Australian phase-out diazinon and ban the use of diazinon pesticides in indoors, on grass cutting, garden, and crops. International organizations such as EPA, WHO, IARC and ACGIH classify diazinon as a non-carcinogenic pesticides.

The aim of this study was to determine the effect of diazinon pesticides on humans, other mammals and environment as well as the feasibility of use of the pesticide diazinon in Indonesia.

This study used systematic reviews design which collect some studies from several journals. Data sourced from nine databases of journal articles in electronic database and found 43 studies corresponding to the inclusions of this study.

Study showed that the effect of pesticide diazinon in humans such as acute and chronic effects, developmental effects, imunotoxicity, genotoxicity, neurotoxicity, reproductive effects, and systematic effects. While The effect on other mammals are neurotoxicity, reproductive effects, imunotoxicity, and systematic effects. The residue of diazinon in air, soil, water, plants and fruits have give negative impact to the environment. Uncomplete data and limited research study make Indonesia have not banned diazinon pesticide, meanwhile based on review study showed the effects of diazinon pesticide in humans, other mammals and the environment and there are several countries have banned diazinon.
Risk Factors Associated With Early And Late Neonatal Deaths In A High Neonatal Mortality Province In Indonesia: A Matched Case-Control Study

Asnawi Abdullah, PhD
Asnawi Abdullah (1,2); Krishna Hort (1,3); Yuli Butu (1); Louise Simpson (1)
Australia Indonesia Partnership for Maternal and Neonatal Health (AIPMNH), Kupang, NTT (1); Department of Biostatistics and Population Health, Faculty of Public Health, University Muhammadiyah Aceh, Banda Aceh, Indonesia (2); Nossal Institute for Global Indonesia
Asnawi.Abdullah@fkm.unmuha.ac.id

Neonatal deaths in developing countries continues to be an urgent global problem as over four million children die within the first month of life. Indonesia has not been immune from this global trend, with neonatal mortality rates (NMR) falling by only 3% annually between 1990 and 2012. Mortality rates have been highest in low resource settings such as those in eastern Indonesia. Nusa Tenggara Timur (NTT) is one of the provinces with a higher rate of neonatal deaths although several innovative programs have been introduced to improve neonatal health. No studies have been conducted specifically to identify contributing factors to neonatal deaths that could be addressed by community level health services. It is therefore important that a study be conducted that enabled comparison of the frequency of known risk factors between newborns who survived and those who died, for both low birth weight and normal birth weight infants, living in similar situations of socio-economic disadvantage.

This study aimed to identify risk factors for early and late neonatal deaths that are amenable to health service interventions at a community level, for low and normal birth weight infants in the province of NTT in Indonesia.

A matched case-control study was conducted in the 14 AIPMNH assisted NTT districts. A case was defined as a neonatal death during the period January 1st to October 30th 2013, that was a singleton birth and non-caesarean-section delivery. Cases were selected from the list of neonatal deaths reported as part of the neonatal audit, from 80 Puskesmas across the 14 districts that were directly supported by the AIPMNH program. Each case was matched with two controls born in the same period of the month, from the same village and the same birth weight category, (1) normal weight and (2) low birth weight < 2,500 gram.

Data was collected on 154 cases of neonatal death from the list of neonatal deaths in each Puskesmas which satisfied criteria for inclusion, and 308 matched surviving neonates (controls) were identified from Puskesmas records. A home visit and face to face interview with the mother was conducted by the Puskesmas midwife using a questionnaire to collect and explore variables not in the Puskesmas records. The questionnaire was tested and piloted in a Puskesmas and a village, and specific training provided for midwives conducting the data collection.

A conditional logistic regression model was performed to calculate crude odds ratio (COR) and adjusted odds ratio (AOR) with 95% confident interval (CI) for any association with neonatal death. The analysis was conducted using clogit procedure in STATA 11 software package version.
This study found eleven main risk factors associated with neonatal death: (1) Newborn complication at delivery; (2) Newborn health problem; (3) Lack of maternal knowledge of new born danger signs; (4) Newborn with low Apgar score; (5) Maternal complications during pregnancy; (6) Home delivery; (7) Previous history of complications; (8) Newborn not receiving Kangaroo Method; (9) Newborn did not receive Early Initiation of Breastfeeding; (10) A high-risk maternal pregnancy, and (11) Age at marriage. Three risk factors (1,2,4) were significantly associated with early neonatal death during 0-7 days. Four risk factors (1,3,7,9) were significantly associated with late neonatal death, 8-28 days. For neonates born with low birth weight, six risk factors (1,2,3,4,6,8) while for those with normal birth weight, three factors (1,3 and 9) were associated with higher risk of neonatal death.

In the design of this study, we were particularly interested in identifying risk factors which were amenable to intervention by community health services, and addressed neonatal death in normal birth weight infants, and in those surviving beyond 7 days. The study confirmed a high proportion of deaths in normal birth weight infants (56%). The three risk factors associated with neonatal death in this group are amenable to community level interventions. The high risk associated with neonatal complications at delivery suggests that parents were aware that the newborn had problems at delivery, and could potentially have sought care for these problems.

The same three factors were associated with late neonatal death, with the addition of a history of complications. As newborns dying after 7 days were probably discharged from the facility of delivery, the importance of community level identification and response to danger signs in the neonate is reinforced.

Early neonatal death was associated with problems at delivery and a low Apgar score, factors which were also associated with a higher risk of death in low birth weight infants. This reinforces the importance of delivery in a health facility where staff have the skills and equipment needed to manage infants with birth asphyxia. This particularly applies to mothers at risk of low birth weight infants, which includes those of young age, suffering from other complications including poor nutrition, and with premature onset of labour. Community level services could develop interventions to arrange urgent transfer of such patients to a health facility, preferably a hospital.

The study reinforces the need for more focus on neonatal care during antenatal care, immediately or shortly after delivery, and in the first month of life, as interventions to reduce neonatal deaths. Several risk factors associated with higher risk of neonatal death have been identified, including the risk factors for early and late neonatal death for new-borns with normal and low birth weights. The study demonstrates the potential for improvement in the quality of maternal and neonatal health care at both community and health facility level to make a major contribution to reducing the risks of neonatal death.
Risk Factors For Musculoskeletal Symptoms Among Heavy Vehicle Drivers

Baiduri Widanarko
Department of Occupational Health and Safety, Faculty of Public Health, Universitas Indonesia Indonesia
baiduri@ui.ac.id

Although musculoskeletal symptoms are prevalent in working population, relatively there have only been a few studies about risk factors for musculoskeletal symptoms in developing countries.

The objective of this study was to examine physical and psychosocial risk factors that were associated with musculoskeletal symptoms.

In order to examine physical and psychosocial risk factors for musculoskeletal symptoms, it is necessary to have sample that are exposed to both risk factors. Heavy vehicle drivers in a coal mining industry in Indonesia fulfill this requirement. A sample of 574 heavy vehicle drivers participated in this study. A self-administered questionnaire was used to assess physical factors (awkward posture, vibration and lifting activities) and psychosocial factors (decision latitude, psychological demand, social support, work satisfaction and work stress) at work and musculoskeletal symptoms during the last 7 days prior the study. Duration of work, age, smoking status, employment status and shift work were included in the analysis. A model from multivariate logistic regression analysis determined the association between explanatory variables and musculoskeletal symptoms. The level of significance was set at p<0.05.

None of the physical factors were associated with MSS whereas job dissatisfaction (OR 4.03, 95% CI 1.41-11.44) and work stress (OR 4.68, 95% CI 2.34-9.37) were associated with MSS. This study has shown that psychosocial factors appear to be more prominent than physical factors in the occurrence of MSS. It implies that to reduce MSS in this study population, prevention strategy should focus on increasing job satisfaction and manage work stress of the workers.
Risk Factors For TB Incidence In Banten Province

Kholis Ernawati
Kholis Ernawati; Qomariyah; Artha Budi Susila Duarsa; Nita Ismayati
University of YARSI
Indonesia
kholis.ernawati@yarsi.ac.id

Pulmonary TB disease remains a public health problem. The prevalence of TB in Banten province ranks third after Papua and North Sulawesi (Riskesdas, 2010). Factors that influence the occurrence of pulmonary tuberculosis among other diseases, socio-economic conditions, age, sex, nutritional status and smoking habits, low endurance, individual characteristics, home environment, work environment, behavior, nutritional status, economic and social.

This study aims to determine the risk factors for pulmonary tuberculosis in Banten province based on data Riskesdas 2010.

The research is quantitative research using cross sectional design (cross-sectional). The research was conducted in April-June 2014. This study uses secondary data is data Basic Health Research (Riskesdas) in 2010. Data were obtained from the Laboratory Data Management MoH RI.

The variables in this study Tuberculosis is a disease, gender, age, weight, height, marital status, education, cough, employment, health seeking behavior, IMT, housing conditions, tobacco consumption, smoking in the home, the old smoke, the amount of consumption smoking, spitting, utilization of health facilities, home condition data variables include: type of floor of the house, bedroom, family room cleanliness, availability windows, family room, living room ventilation and natural lighting family room). Used analysis is univariate, bivariate and multivariate. To determine the most dominant variable to the potential transmission of TB used multiple logistic regression test.

The prevalence of TB in Banten was at 2.6%. From the bivariate analysis, the variables associated with the incidence of TB is marital status \( p = 0.001 \), cough \( p = <0.001 \), search patterns of treatment \( p = 0.025 \), age \( p = <0.001 \), weight \( p = 0.001 \), BMI \( p = 0.001 \), tobacco consumption \( p = <0.001 \), health care utilization \( p = 0.003 \), duration of smoking \( p = 0.013 \), and spitting up \( p = <0.001 \).

Multivariate analysis showed that the most effect on the incidence of TB is spitting up \( p = 0.038 \) after controlled by marital status, educational status, employment status, age, BMI and smoking duration in which the habit of spitting on the tin increases the risk of TB by 5 times compared with those who do not have a habit of spitting (95% CI = 1.1 to 26.7).
Risk Perception Of Fire Hazards In A Rural Ethnic Minority Village In China

Kelvin Wai Kit Ling
Kelvin Wai Kit Ling; Zhe Huang; Carman Ka Man Mark; Emily Ying Yang Chan
Collaborating Centre for Oxford University and CUHK for Disaster and Humanitarian Response, Chinese University of Hong Kong
Hong Kong
kling@link.cuhk.edu.hk

Fire is an important hazard to rural ethnic communities in China. Specifically, wooden building structures of Dong ethnic minority tribe in the southwestern China pose higher fire risks.

To evaluate villagers changes in risk perception towards fire hazards after a health promotion intervention in rural China

A pre-test and post-test education-based health promotion intervention study was conducted in January 2015. Sixty-four Dong tribe villagers in rural Nanjiang village (population size: 1,442), Guizhou province. Ethics approval was obtained from the Chinese University of Hong Kong. A pre-post comparison was made using descriptive analysis to assess the intervention outcomes.

A total of 56 pre-post surveys was analysed and the completion rate was 87.5%. For fire response awareness, only 7.27% (n=4) of the participants knew what a fire blanket is compared with 52.7% (n=29) after intervention (p<0.001, McNemars test). One-thirds (n=16, 33.3%) perceived for what fire blankets are used before intervention whereas more than 70 percent (n=35, 72.9%) did so after (p=0.003, McNemars test). On the knowledge of immediate response to fire, 48.2% (n=27) of the villagers were aware of the emergency number for fire services and more than 85 percent (n=48, 85.7%) had this awareness after intervention. To further test their recall of that number, more than three-quarters (n=43, 76.8%) were able to do so after intervention compared to 37.5% before. Both differences were significant (p<0.001, McNemars test). A note of caution was observed that 73.8% of the participants (n=31) did not perceive any fire risks in their houses even after intervention (p=0.289, McNemars test).

Despite positive changes in enhancing some knowledge of emergency response awareness after intervention, the perception of fire risks was not high in this ethnic minority village. Further effort to understand the underlying factors of such risk perception pattern is required.
Role Of Caregiver In Nutrition For Survive Of Cancer Patient

Sri Adiningsih  
Stevana Danty Putri Caesandri; Sri Adiningsih  
FKM UNAIR  
Indonesia  
sadiningsih@yahoo.com

Cancer patients had decreased in appetite which leads to weight loss and nutrition status got worse with the side effect of chemotherapy or radiotherapy. Food had an important role for cancer patients since diagnose, the implementation of medical therapy, until healing which it was need support family or chaperone.

The purpose was to analyze the relationship between the role of family support with the consumption patterns of cancer patients. The purpose was to analyze the relationship between the role of family support with the consumption patterns of cancer patients.

This was a descriptive research, cross sectional study design, which sample was 20 chaperone of total population of cancer patients in shelter house of Cancer Foundation Indonesia branch of East Java. Data collected by interview about the characteristics of cancer patient (stadium, treatment, sign and symptom, health status), and caregiver (knowledge of cancer and food, role and support nutrition), and consumption patterns of cancer patient (type, frequency, how to cook, consumption of supplements. Data analyzed of the role of chaperone, Healthy Eating Index (HEI) of food consumption.

Result found that mostly patient was cervix cancer, in third stadium which had a radiation therapy, care giver had chaperone role which the level of knowledge well known about cancer and food, except give meal in frequent but small portion, free all type food for sickness patient in daily after treatment,. Most cancer patients meet the criteria for diet needs improvement in HEI, iron consumptions, as well as how to cook fried and boiled. Conclude caregiver has not only provided good support to cancer patients treatment-related eating problem, but need also psychologist support for survive patient in treatment. So important for prepare patient in good nutrition before received of radiation or chemo therapy. Conclude caregiver has not only provided good support to cancer patients treatment-related eating problem, but need also psychologist support for survive patient in treatment. So important for prepare patient in good nutrition before received of radiation or chemo therapy.
Safety Climate Level Survey At Motorcycle Factory

Dadan Erwandi
Dadan Erwandi; R. Abdullah Musa; Yuni Kusminanti
Occupational Health & Safety Departement, Faculty of Public Health, Universitas Indonesia, BOB Bumi Siak Pusako Pertamina Hulu Energi Indonesia
dadanerwandi@yahoo.com

The usages of Motorcycles continued grow and become one of the main mode transportation in Indonesia. There are several motorcycle factory in Indonesia. One of them is PT X which has 3 assembly plant facilities. The first factory is located in Jakarta and Bekasi. Currently, PT X has employees around 15,000 people, plus 130 vendors and suppliers as well as thousands of other networks, which provide tremendous economic impact. The whole chain of the production process is expected to provide job opportunities for 500 thousand people. Consumer which uses motorcycles growth significantly. In the middle of competitiveness era from many new brands today, PT X which has been long time in Indonesia with all its advantages still continue dominate the market and fulfill the needs of strong, efficient, and economical transportation. Answering these challenges, organizations that were behind the success of PT X motorcycles in Indonesia continues to strengthen itself.

Based on that description above, PT. X plan to implement a program of Behavior Based Safety (BBS) and the OHS Cultural Development. Through this program is expected to obtain the implementation of the behavioral aspects of Work Safety to the operational level jobs, at all organizational levels for both permanent employees and contractors. OHS can improve overall performance and meet the expectations of the creation of effective operating reliability and cultured OHS.

This study was generally performed to get an overview of the behavior and determine the recommendation in order to improve the OHS Culture and Behavior in Company.

Specifically this study was conducted to:

1. Obtain overview OHS Culture Profile in PT.X
2. Prepare the recommendation in order to improve the OHS Culture and Behavior in PT X in Indonesia.

This study was conducted using a quantitative survey design and field observations. There are three aspects and each aspects contain several variables such as:

1. Organizational aspect (Management Commitment, Communication, Safety Rules and Procedures)
2. Work Group aspect (Work Environment, Involvement)
3. Individual aspect (Personal Priority & Need for Safety, Personal Appreciation of Risk)

The survey was conducted at PT. XPlant 3A Bekasi. The population in this study were all workers in the PT. XPlant 3A Bekasi. In this study other than permanent workers (organic) included also contract workers and vendors. Samples in this study are determined based on the representativeness of the population. The criteria in determining the participants is as follows:
a. Position or level
b. Work unit. The number of participants preferred the working unit that has the characteristics of higher hazard and risk level employment.
c. Worker status which is permanent, contract and vendor.

The total sample of 476 people (386 permanent employees, 73 contract workers, 17 vendors)

The data collected will be analyzed using quantitative and qualitative methods, is as follows:

a. Quantitative analysis of the primary data from questionnaires Safety Climate.
b. Qualitative analysis of secondary data and analytical results behavioral observation of work that had been done.

These data were reliability and validity tested before these data were analyzed. Instrument reliability test results above 0.6 and validity was above 0.4.

The survey results show that in general the average value of respondents' perceptions of safety culture climate (safety climate) are at the value of 3.01 (scale range 1-5). Safety climate illustrates the workers perception or assessment of the extent of OHS implementation in the company. With an average value of 3.01 it can be said that the assessment of the workers'

OHS implementation values in the company has been good.

Overview of the assessment can be divided into three aspects of the assessment of climate-related OHS culture of individual parts of the organization, the individual parts of the unit and as individuals. Based on the survey results in mind that the highest average value in the OHS cultural climate aspects in the organization (3.42), the second on the OHS cultural climate aspects in the work group (3.20) and the last aspects of the OHS cultural climate in Individuals (2.40). It shows that:

1. Efforts implementing OHS cultural values of PT. X Bekasi has done well, but still likely at the instigation of the management company or to comply with existing regulations. Orientation activities/programs and internalization of OHS values conducted by PT. X is focused to the development of policies, rules and safe work procedures originating from management.

2. When viewed in the average value of each dimension, visible deterioration in the average value of the highest to the lowest average value. From the organizational aspect (3.42) and then decreased at the aspect of the work unit (3.20) and declined in individual aspect (2.40). It can be assumed that the OHS values PT.X basically have grown and started to display on the good OHS implementation at management level and work units; but the aspect of the individual is still not deeply rooted. That is, on the implementation on the ground or in the workplace OHS values still run for fear of being punishment or forced not because of the awareness of the workers themselves.

3. Perception of workers against the OHS values at the level of the organization that has good (3.42) indicate that worker as part of the company has felt that:

a. Management has also established policies, rules and procedures related to OHS well that is reflected in the Safety Rule and Procedure (3.43).
b. The management company has had a strong commitment to OHS is characterized by the high value of Management Commitment (3.29).
c. OHS aspects has been well communicated by the management company that is characterized by the value of Communication (3.46).

4. In the aspect of work units shown that the perception of workers is good enough (value 3.20). This marked quite high perceptions of the working environment of workers (3.32) and the involvement of workers towards the OHS implementation in the work unit (3.07), although it was lower than the average value on the dimensions of the organization. This phenomenon indicates that:

a. The OHS values related to working conditions, facilities and equipment as well as support from the social environment, especially at the level of the work unit, not yet fully visible as a means to motivate employees in implementing OHS.
b. OHS involvement of the workers in the form of awareness and participation of workers in OHS activities has been done although tend still limited to compliance policies and standards set by the company alone is not accompanied by a sense of belonging to the optimal OHS implementation activity.

5. At the individual aspect are results that should be observed, namely:

a. Perception of workers to OHS as the main thing inside workers already good looks. It is characterized by the value of the Personal Priority & Need for Safety (3.72) which has the highest value among the values of other OHS. It can also be assumed that the OHS as an understanding of the needs of the present work is good.
b. The existence of a considerable difference between the average value of Personal Priority and Need for safety (3.72) with an average value Personal Appreciation of Risk (2.39). This shows that the understanding of the OHS values as a universal value is still not followed by good and correct attitude towards occupational risks. This is often the case could have been due to the lack of motivation/encouragement to workers to behave consistently in a safe work or the lack of supervision so that safe behavior in work have not been shown optimally while working.
c. Fairly low value Personal Appreciation of Risk (2.39) is also reflecting the need to increase the OHS values on the individual and knowledge related to the job, not just knowledge covers the technical aspects but also the knowledge of the essence of safety (safety value) as well as knowledge of risk specific to the job.

6. The OHS values that has been grown and implanted, it can be said it is already good, but in principle, OHS strong culture is not only reflected on the importance of safety as a necessity, but also need to appear in the form of appreciation of the attitude towards risk work and involvement to OHS in the workplace. Typically, the attitude towards the risks are not appropriate, appear in the form of at risk behavior.

The levels of safety perception among all employees are already in moderate level. In moderate level, perception of safety may support the implementation of safety behavior in the company.

To increase efforts of OHS value investment and raise the level of OHS cultural maturity in PT. X, then the company can:

1. Disseminating the survey results this culture to all levels in the company. Cascade down mechanism can be done through OHS meetings. Socialization aims to present a profile or joint portrait of the company not to show the errors of certain parties.

2. Reviewing all OHS Management System devices that already exist and are run during this time such as policies, manuals, procedures, work instructions, HSE Plan, and others to do a review on the
substance and quality of the implementation. So it can be immediately known weaknesses of the existing system, then repaired and implementing. It is important to ensure that the company has provided the OHS needed on improving OHS behavior and culture survived. Review the example on the OHS system which are directly related to the OHS implementation on technical jobs such as permit to work, hazard analysis techniques, inspection, OHS induction, HIRADC, JSA and others.
Self-Efficacy And Adolescent Smoking Behavior

Asnawi Abdullah
Wiwin Haryati (1); Asnawi Abdullah (2); Bakhtiar (3)
Magister Keperawatan Universitas Syiah Kuala Banda Aceh (1); Fakultas Kesehatan Masyarakat Universitas Muhammadiyah Aceh, Banda Aceh (2); Fakultas Kedokteran Universitas Syiah Kuala (3) Indonesia
Asnawi.Abdullah@fkm.unmuha.ac.id

A national survey showed that approximately 35% of Indonesian are smokers and 30% of them are adolescent. It is estimated the number of smokers among adolescent in Indonesia and elsewhere are increasing in near future as young age has been a main target of tobacco company campaign since last decades. Therefore, any innovative smoking preventive strategies targeted adolescent should be scrutinized and explored. Smoking behavior among adolescent as part of their curiosity and their adventurous and it should be directed into a positive behavior. The level of self-efficacy might determine of their behavior. However, currently, lack of study in this area has been conducted in Indonesia. No certainty yet, which components of self-efficacy - performance accomplishment in school, vicarious in learning, social persuasion or emotional arousal have strong association with adolescent smoking behavior. By finding this, an innovative smoking preventive strategy targeted adolescent is expected can be formulated and suggested in Indonesia and elsewhere.

This study aimed to identify to what extent self-efficacy - performance accomplishment, vicarious experience, social persuasion, and emotional arousal associated with smoking behavior among adolescent smoking behaviors. Another aim of the study was to determinant which determinants of self-efficacy had strong an association with smoking behaviors among senior high school students.

A cross sectional study design was conducted to examine the objective of this study. Self-efficacy was analyzed through four domains of performance accomplishment, vicarious experience, social persuasion and emotional arousal. The population of study was adolescent senior high school (SMA) students in Banda Aceh, Indonesia. 363 students from 13 SMA have been selected for the purpose of this study through stratified random sampling. Data was collected using a modified general perceived self-efficacy instrument developed by Schwarzer (2000). Instrument was validated (n=30) and reliability test was performed (Cronbachs alpha 0.72). Data was analyzed using simple and multiple logistic regression analysis adjusted for sex, age and class. The analysis was performed using STATA 11.

The study showed that there is a strong statistically association between smoking behavior among adolescent senior high school students with their self-efficacy (P value 0.0001). Students who has strong level of self-efficacy the odds not to smoke was 55 times (95% CI: 7“427) higher than odds of lower self-efficacy. Students who have higher level of performance accomplishment the odd not to smoke was 15 times (95% CI: 5“46) than the odd of lower performance accomplishment. Moreover, students who have higher level of vicarious experience and emotional arousal the odd not to smoke was higher (Adjusted Odd Ratio 63 [95% CI: 5“45]; 36 [95% CI: 36“159]) than the lower of vicarious experience and emotional arousal receptively. In contrast, the social persuasion showed no statistically significant association with adolescent smoking behavior. However, after all these
dimensions of performance accomplishment, vicarious experience, social persuasion and emotional arousal combined into a single model, only the dimension of student performance accomplishment was found to be a stronger predictor of adolescent smoking behavior.

The previous study found that self-efficacy was associated with all four components or dimensions of 1) performance accomplishment, 2) vicarious experience, 3) social persuasion, and 4) emotional arousal. However, our study found that only three components were found to be statistically significant association with smoking behavior; and the performance accomplishment was found to be a stronger predictor of adolescent smoking behavior. Vicarious experience and emotional arousal were found to be an important component of self-efficacy but when it combined with other dimensions, the role was dismissed. In the previous study also concluded that self-efficacy can be strengthened and weakened through social persuasion but in our study found that the role of this dimension is limited and probably only in certain and appropriate condition a social persuasion might work and influence of adolescent smoking behavior.

This study concluded that self-efficacy particularly performance accomplishment is an important predictor of adolescent smoking behavior. This suggested the risk of smoking among adolescent can be reduce by improving their self-efficacy. Therefore an appropriate implementing strategies to increase the level of adolescent self-efficacy should be explored and identified further.
Sexual Risk Behavior Among University Students In Phayao Province Thailand: A Situation Analysis

Katekaew Seangpraw
Katekaew Seangpraw
School of Medicine, University of Phayao
Thailand
eungkaew@gmail.com

Phayao province with high prevalence of sexually transmitted infections in north Thailand has led to an increased interest in understanding the determinants of sexual activity among university students, who are at high risk of sexually transmitted infection.

This study was to determine factors related to sexual risk behaviors among university students. Subjects were university students in the Muang District of Phayao province, selected by means of purposive sampling. Sexual activity is associated with a variety of factors, including knowledge, self-awareness, self-esteem, decision-making and problem-solving skills, communication skills, and behaviors preventive toward sexual risk behaviors.

A total of 550 university students aged between 18-21 years old were surveyed in University of Phayao. A self-administered questionnaires was distributed to all participating university students. Chi-square and Fishers exact were used to analyze data.

Approximately 78.5% of females and 21.5% of males reported having had sexual intercourse at least once in their lifetimes with a significant proportion reporting multiple sexual partnerships. Sexual experience was associated with various factors including condom use, alcohol use, source of information, whom to discussion, knowledge, decision-making and problem-solving skills, and communication skills (p <0.001).

Conclusion: Therefore, interventions regarding life skills, self-efficacy improvement in avoiding access to sexual motivated media among students, and in communication skills including sexual risk behavior among parents should be developed.
Should Smoking Status Be Used As One Of The Conditions For Recipients Of Public Social Security

Wahyu A. Tias
Wahyu Aning Tias; Mubasysyir Hasanbasri
Universitas Gadjah Mada
Indonesia
wahyuaningtias@gmail.com

Social security is to eliminate the cost barrier when someone falls ill. Smoking is a major risk factor for chronic obstructive pulmonary disease, heart disease and lung cancer. It is estimated that tobacco consumption in Indonesia has resulted in more than 200,000 deaths annually. More than 96 million of Indonesian people who receive social security consists of the poor and near poor. At the same time, the poor and near-poor dominate the number of active smokers in Indonesia amounted to 54.2% (Riskesdas, 2013).

In fact, smoking is the second-largest expense after spending rice in poor communities. Public social security beneficiaries spend the majority of their income on cigarettes expenditure up 11.9% compared with staple food consumption expenditure on average by 2.7% only.

In view of public health, health promotion should decrease smoking behavior among the poor. Smoking expenditure on the poor must be able to be transferred to purchase more healthy food for their health.

The goal of this study is to see ethical dilemma on giving social assistance to the poor while they keep spending their own money for cigarette. We did a content analysis of online news and online public opinions during 2013 until January 2015. There are more and more voices that criticize the criteria in the provision of social assistance who do not pay attention to smoking status of the recipient or the head of the family.

Two most common reasons as to why smoking should be conditional for receiving social assistance are the state spending to pay a premium commensurate with the value of expenditure incurred for cigarettes and income from taxes on cigarettes is not ever enough for paying premium for social security because they seems bigger, but in fact, sick people (related to tobacco) is much greater.

While, the social assistance benefits is the right for the poor and near-poor, even smoker and the lifting of the right to public social security benefits on smoker will potentially lengthen of the level of poverty because it is difficult to recover from tobacco addiction, are the most common reasons in supporting the opposite option. Social security, regardless family expenses for cigarettes provide an opportunity for smokers to keep buying goods that are harmful to their health. The poor and near-poor who smoke should not eligible to obtain social security.

In response to this, more intensive discussions are needed to review social assistance as not only to reduce financial barriers to public services, but also as a tool for public health promotion among the poor.
Smoke Free Regulation: Analysis Of Local Policy Documents In Indonesia

Puput Oktamianti
Puput Oktamianti
Faculty of Public Health, Universitas Indonesia
Indonesia
oktamianti@gmail.com

Framework Convention on Tobacco control (FCTC) is the convention developed by WHO in response to dangers related to tobacco use. However, Indonesia not yet ratification of FCTC, both national government and local government levels in Indonesia have conducted many strategies and program to control the impact of tobacco use including smoke free regulation. Smoke free regulations are increasing in various provinces and districts throughout the Indonesia. But, as decentralization many regulation product as the local regulation are varies. The contents of the local policy documents between provinces and districts sometimes are not similar.

This paper describes the variation content of local policy documents related to smoke free. This analyzes including to what extend the regulation of free smoke that applies to indoor worksites and public places within the community. And also to analyzed how the law and sanction regulated in smoke free regulations.

We analyzed the local policy documents of smoke free which are published in internet. Collecting document was conducted in April 2015. The following search terms were used to found the document are: perda rokok, peraturan kawasan tanpa rokok, peraturan rokok, ketertiban, kebersihan, keindahan. The final documents were 47 documents. The study analyzed by sub topic as level of regulation (district/province), kind of policy (perda/peraturanbupati/peraturanwalikota/suratedaran), namely of regulation document, area restriction for smoking, and the law and sanction.

A smoke free regulation is strategy for reducing exposure to secondhand smoke. The regulations are also implemented to create healthier environments. There were 40 districts and 7 provinces issued smoke free regulations which were published between 2005 until 2014. These document consist of 68% regional regulation or perda, 30% heads of region regulation (governor/regent/mayoral regulation), and 2% local circular letters or suratedaran. General coverage of the smoke free regulation focused on health reasons for introducing the ban.

The name of smoke free regulations in local regulation are varies, such as smoke free areas (kawasantanparokok), smoke free areas and limited smoke areas (kawasantanparokokdankawasanterbatasmerokok). Some regulation legalized smoke free regulation within the regulation of orderliness, cleanness, and fineness (ketertiban, kebersihandankeindahan),so that this regulation did not explain the smoke free regulation detail.

All of local regulations stated the places as smoke free areas that are health facilities, education facilities, prayer facilities, and children ground facilities. Most of this document also defined public transportation, public area and workplace as part of smoke free areas. These restrictions drive people to smoke at home. Generally, home is not stated in the regulation as smoke free area.
Kind of enforcements of smoke free regulation in many of districts are varies such as there are no sanctions, criminal sanctions that varies between 3 days until 6 months, or and financial penalties range between Rp. 0 until Rp. 50.000.000,-. But there are also some smoke free regulation did not set the law and sanctions. The lack of presentation of law and sanctions in smoke free regulation will be weakness the implementation of regulation. People or smoker will be not afraid with the regulation.
Social Determinants Of Maternal And Child Undernutrition In Cambodia: A Systematic Review

Pheak Chhoun
Pheak Chhoun, Khuondyla Pal, Candice Collins, Sovannary Tout, Siyan Yi
Research Center for Population Health, KHANA
Cambodia
cpheak@khana.org.kh

Maternal and child malnutrition has been broadly recognized as a major public health concern in most parts of the world. Stunting and severe wasting in children and poor nutritional status in mothers, among others, contribute to an increase in the overall burden of disease and mortality in children around the world. Many social and physical factors have been shown to be associated with undernutrition in children in developing countries, including: low body mass index (BMI), food insecurity, and maternal education. In Cambodia, undernutrition among mothers and children has been known as an underlying cause of mortality. Although there are some informative studies on maternal and child malnutrition, it is imperative to identify specific social determinants that influence child malnutrition in Cambodia.

This systematic review aims at analysing the literature on maternal and child undernutrition in Cambodia to identify social determinants of maternal and child undernutrition; understand the prevalence of maternal and child undernutrition, and the policy, programs and interventions addressing this problem. This information may help policy-makers to understand, draw attention to and help improve this public health issue with effective interventions focusing on social determinants of the problem.

A systematic literature search was performed through related journal databases including ProQuest Central, Scopus, PubMed, Medline (Ovid), Google scholar, and World Health Organization Statistical Information System (WHOSIS). Hand searches were also conducted on publications and reports from the Ministry of Health and Ministry of Planning, among others. Keywords such as social determinant, maternal and child health, undernutrition, and Cambodia were used to search for literature in English for a 10 year period (2003-2013). Inclusion and exclusion criteria included English language, country (Cambodia), and period of publication. Finally, content analysis was conducted among final selected papers to generate emerging themes.

In total, 25 articles met the inclusion criteria and were selected for the review. The prevalence and social determinants of maternal and child undernutrition were two themes found during this review. In 2010, 19% of women aged 15-49 years were underweight, defined as having BMI of < 18.5 kg/m2. The prevalence remained at a similar rate between 2000 and 2005 at about 21%. The prevalence in rural and urban areas was 20% and 17%, respectively. Regarding the prevalence of child malnutrition, 45% of children under five years of age were stunted; 11% were wasted; and 29% were underweight. We identified six social determinants of maternal and child undernutrition, including poverty, income inequity, food insecurity, mothers education, infections, and gender inequity.
Poverty rate in Cambodia is one of the highest among developing countries. Many poor households have a limited chance to consume nutritious food, access clean water, or utilize health care services, which contributes to the incidence of undernutrition among women and children. As household wealth increases, the prevalence of undernutrition decreases, especially among women and children. Men tend to be more employed than women, therefore female headed households suffer from income inequity. The study found that 25% of households in Cambodia experiences food insecurity, which includes low quality and continuity of food access and dietary diversity in food consumption. One article showed that greater education attainment of mothers contributes to new skills, belief, and choices about health and nutritional practices, which can directly determine nutritional status in themselves and their children. This literary analysis also found that parasitic and infectious diseases can impact undernutrition. The infections cause fever and micronutrient deficiencies as it diverts nutrients from the body leading to undernutrition. Finally, gender inequities is an environmental factor contributing to maternal and child undernutrition. Beyond biological differences, gender roles, social norms and behaviours have an influence on the way that women, men, girls and boys are capable of accessing health services, in addition to how health care systems respond to their needs. Cambodia is limited in the number of intervention programs that address maternal and child undernutrition issues. Those that do exist need to be broadened from small coverage to national coverage and begin to implement a more socio-environmental model. It is also recommended that more supportive interventions and enabling environments are created to improve maternal and child undernutrition.
Social Smoking And Mental Health Among Chinese Male College Students

Meijun Chen
Meijun Chen; Longbiao Cai; Fangrong Xu; Qiqiang He
Wuhan University
People's Republic of China
826866476@qq.com

China has a high prevalence of smoking, but the characteristics of social smoking in Chinese college students have not been investigated.

To examine the pattern of social smoking and explore the association between social smoking and personal cessation efforts and mental health factors among Chinese male college students.

A cross-sectional survey was conducted in Wuhan P. R. China. A random sample of 1327 male college students completed a self-administered questionnaire that examined their smoking behaviors and a group of specific mental health factors (loneliness, self-harm, suicide, depression, and anxiety). Analysis was conducted using descriptive statistics, χ² analysis, and multivariate logistic regression.

Among a total of 207 current smokers, 102 (49.3%) were identified as social smokers. Compared with non-smokers, social smokers had increased risks for depression (odds ratio (OR): 1.74; 95% confidence interval (CI): 1.15-2.65). Among daily smokers, social smokers were less likely to have an intention to quit smoking than non-social smokers (OR: 0.08; 95% CI: 0.01-0.57). This study reveals unique psychological characteristics related to social smoking. College students are a particular group of interest because unhealthy behaviors initiated during adolescence may continue through adulthood. Our findings provide evidence for future tobacco control intervention among this population.
Socioeconomic Disparities Of Multiple Risk Factors For Cardiovascular Diseases (CVD) Among Adolescents In Malaysia

Nithiah Thangiah

Nithiah Thangiah; Muhammad Yazid Jalaludin; Hazreen Abdul Majid; Tin Tin Su

University of Malaya
Malaysia
nithiah_6@yahoo.com

Cardiovascular disease (CVD) which begins early in life but often is not manifested until adulthood is a cause for concern among adolescents. Tackling the risk factors of CVD in an early age is imperative to curb the rising burden of CVD death in Malaysia. Traditionally, most preventive programs target single risk factors of CVD to create awareness. Little is known on the prevalence of multiple risk factors of CVD among adolescents and its snowballing effect on CVD occurrences.

The purpose of this study is to determine the prevalence and socioeconomic distribution of multiple risk factors for CVD among adolescents in Malaysia.

In 2012, a cross-sectional study among a representative sample of adolescents aged 13 years was carried out in the central zone of Malaysia. The Malaysian Health and Adolescents Longitudinal Research Team study (MyHeARTs) surveyed and examined 1,376 secondary school students randomly selected from urban and rural schools through multi-stage cluster sampling. Adolescents having two or more of the following risk factors namely high blood pressure, high blood cholesterol, diabetes mellitus, obesity, ever smoker and no/low physical activity were considered as having multiple risk factors for CVD.

Overall, 13.74 % (95% CI, 11.91 15.56) of adolescents had no risk factors, 43.24% (95% CI, 40.62 45.86) reported one risk factor with obesity being reported as the most common risk factor and 43.02% (95% CI, 40.40 45.64) reported having multiple risk factors with the majority having 2 risk factors. Prevalence of multiple risk factors was almost two times higher among female as compared to male adolescents with significant differences (p < 0.001). Neither difference nor significant difference were observed in the prevalence of multiple risk factors among adolescents from urban and rural areas (p = 0.126). The prevalence of having multiple risk factors was greater among adolescents from lower socioeconomic status. Almost 50% of adolescents from households with family income lower than RM 1500 per month and one-third of adolescents with parents from low levels of education have multiple risk factors.

This study indicates that a high proportion of Malaysian adolescents have multiple risk factors for CVD and most of them belong to families of lower socioeconomic status. The results from this study can help policy makers develop preventive programs that specifically take into account multiple risk factors of CVD. As risk factors of CVD tend to co-occur thus preventive programs should focus on multiple rather than single risk factors while prioritizing adolescents from families of lower socioeconomic status. This strategy is hoped to reduce the risk of developing CVD in early adulthood thus contributing to the decline in CVD prevalence and CVD mortality in Malaysia.
Spatial Access To Health Services Patient Diagnosis Of Tuberculosis In Papua Province, Indonesia

Martya Rahmaniati
Martya Rahmaniati
Universitas Indonesia
Indonesia
tyarm@ui.ac.id

Tuberculosis (TB) is an infectious disease directly caused by TB bacteria (Mycobacterium tuberculosis). Indonesia now ranked fifth among countries with the highest TB burden in the world.

Finding and cure the patient is the best way in preventing transmission of TB, the WHO since 1995 implementing the DOTS strategy. DOTS primary focus is the discovery and cure patients, this strategy is expected to break the chain of transmission of TB so that will reduce the incidence of TB in the community.

From the analysis Riskesdas 2010, access to health facilities are hospitals, health centers and physician practices for sputum examination and pulmonary photo and the majority of TB patients life in urban areas. Papua Province, a province in east Indonesia with the geographical conditions largely mountainous. In the province of Papua, the number of patients with TB diagnosis access health services only 45.77%.

The aim of this study was to obtain health care access model diagnosis of pulmonary TB patients who are affected by the characteristic of the diagnosis of TB patients, the health facilities and the condition of the fact the region, socio-economic factors, the condition of health infrastructure, the spatial aspect (slope) and the infrastructure of the region (pavement).

This research is a quantitative approach that uses a cross-sectional design (cross-sectional). The data used is derived from the RISKESDAS 2013 from Ministry of Health. Research area is in the province of Papua, Indonesia. Research method is a spatial approach using spatial statistics analysis, Geographically Weighted Regression (GWR).

Access to health care of patients the diagnosis of TB include sputum examination, X-ray examination and provision of anti-TB drugs. Access to health care of patients the diagnosis is still very low, in the province of Papua is only 45.77%.

Spatial models of access to health services in the province of Papua is formed of variable age <60 years, high economic, travel time is less than 30 minutes, use of transportation, PRM, the existence of health centers, hospitals and integrated health. In the province of Papua variables that have a local effect is of high economic, travel time is less than 30 minutes, use of transportation, PRM, the existence of health centers, hospitals. The significant local variable is travel time <30

Conclusion, spatial models of access to health services in the province of Papua is influenced by spatial interaction, which is formed of local variables and global variables.
Chikungunya is an arboviral disease transmitted by Aedes sp. mosquitoes which have been infected with alphavirus. Outbreaks of chikungunya have been reported in some areas of Indonesia. Since its first discovered in Indonesia, chikungunya shows an increasing trend number of cases and total area affected. December 2011, there are 199 new cases of chikungunya were reported from Depok and stated as an outbreak.

This research is aimed to determine the spatial analysis of chikungunya in Depok year 2008-2011. It then uses an ecological study by correlate method, graphic analysis, and spatial analysis from secondary data.

The results showed spatially, the large number of chikungunya cases have been found in areas with high population density and low larvae-free index. The high risk area of chikungunya can be found in the center of Depok to the north. Statistically, rainfall has a significant correlation with chikungunya. Meanwhile, there is no significant correlation between temperature, humidity, population density, and larvae-free index with chikungunya. Depok Health Office should be anticipating chikungunya cases before monsoon and shortly in post-monsoon. Therefore, Depok Health Office can be more focusing on doing prevention and control programs in areas with high risk of chikungunya.
Spatiotemporal Analysis Of Dengue Hemorrhagic Fever Cases In Bandung, Indonesia

Sri Yusnita Irda Sari
Sari SYI; Rinawan FR; Natalia YA; Agustian D; Raksanagara AS; Umezaki M
Padjadjaran University
Indonesia
italatif@yahoo.com

Dengue Hemorrhagic Fever (DHF) as one of public health problem in Indonesia remain steadily increased although several control programs had been implemented. Spatio-temporal epidemiology studies were still limited particularly for analyzing clustering and land-used changing.

This study aimed to identify target areas for effective prevention and control programs by finding DHF trend in 6 years.

Hospital surveilance on DHF with total 28,327 cases from 2008-2013 in Bandung city were geocoded into subdistrict level and analyzed using retrospective discrete Poisson model to find most likely cluster area over time and space using Satscan and ArcGIS. Spearman Correlation analysis was done between demographic factors and vegetation index with incidence rate (IR) in each area.

DHF prevalence was increasing over 6 years in accordance with high precipitation period during January-May, 42.3% found among school-age group and 38.1% among adult. Spatio-temporal analysis showed that the infection concentrated in several cluster areas during 2009 and change into east part of the city in 2013 which concordance with the change of land-use indicate by NDVI differences between 2008-2012. Population density, number of family, poor people, and schools building had moderate negative correlation with DHF IR. Average of NDVI in each area had moderate negative correlation with IR in 2008 (r=-0.258, p=0001), however low positive correlation was found in 2012 (r=0.193, p=0.017).

In conclusion, Clear geographical pattern by cluster identification overtime is beneficial for targeting appropriate vector-control program. NDVI as an indicator of land-use change could be used as potential environmental risk factor for DHF incidence.
Tuberculosis (TB) is communicable infection disease that still is problem in the world. The prevalence of tuberculosis in prison is higher than in the public. People who affected with tuberculosis can be dying. Recent researches show that status of HIV can caused people affected in Tuberculosis. HIV can decrease immunology then reactive TB latent or infection in new people and will increase probability to be sick. This research then comes to find relationship between Status of HIV and Pulmonary Tuberculosis base on individual characteristics (age, education, duration in prison, and has been alcoholic in the past). The research was done with cross-sectional design with 241 samples of prisoners who registered on 2013 and still is in Drug Users Prison in Jakarta, Indonesia. In beginning, sample size is 250 samples, but when cleaning, there is 9 samples who doesnt complete the questioner, so they doesnt include in analysis. Sample will fill the questioner by self administered method. Status HIV and TB be checked in health facility in prison and has confirmed by doctors. Individual characteristics (age, education, duration in prison, and has been alcoholic in the past) obtain by questioner. The analysis was done with chi-square and logistic regression analysis by software compute.

It found that 6.2% respondents were have TB. Based on bivariate analysis, the research also found those prisoners who have HIV will have higher risk to be tuberculosis than who doesnt have HIV (PR: 7.6; 95%CI: 2.995-19.085). Based on age, there is different risk between prisoners who have HIV and dont have HIV to be Tuberculosis. Prisoner who age 40 and have HIV is 8.6 higher risk to have pulmonary tuberculosis than who age 40 and doesnt have HIV (PR: 8.6; 95% CI: 2.562-28.865), but prisoner who age >40 and have HIV is 4.9 higher risk to have pulmonary tuberculosis than who age >40 and doesnt have HIV. It can be caused by almost prisoners is young and drug user. Based on education, there is not too much different risk between prisoners who have HIV and dont have HIV to be Tuberculosis (PR: 6.8; 95% CI: 1.284-36.020 and PR: 7.6; 95%CI: 2.692-44.138). In this case, friends are more influence than education to make a good habit. Based on duration in prison, there is not too much different risk between prisoners who have HIV and dont have HIV to be Tuberculosis (PR: 7.1; 95% CI: 1.790-28.504 and PR: 7.7; 95%CI: 2.061-28.028). In this research, its imperceptibility when the duration of infection. Base on has been alcoholic in the past, there is different risk between prisoners who have HIV and dont have HIV to be Tuberculosis. Prisoners who doesnt has been alcoholic in the past and have HIV is 10.4 higher risks to have pulmonary tuberculosis than who doesnt has been alcoholic in the past and doesnt have HIV (PR: 10.4; 95% CI: 1.039-104.051), but prisoners who has been alcoholic in the past and have HIV is 7.8 higher risk to have pulmonary tuberculosis than who has been alcoholic in the past and not have HIV (PR: 7.8; 95% CI: 2.820-21.627). Although that, in descriptive analysis, prisoners who have HIV more than doesnt have HIV to be pulmonary tuberculosis. In conclusion, the relationship between status of HIV and pulmonary TB have preference happen in respondent who have age 40 years old and doesnt have been alcoholic in the past.
Street-Food Daily Consumption In A Low-Income Area In Jakarta: Risk Perception And Socio-Economic Explanations

Laura Arciniegas MA
Laura Arciniegas MA; Dr. dra. Evi Martha MKes; Andham Dewi SKM; Fatmawati Ssos.
Cirad UMR Moisa / CerTop UMR 5044 (France) - PKIP FKM UI (Depok)
France
laura.arciniegas@cirad.fr

In low-income settlements of Jakarta first floor economy is essential for the survival of households. The cost and the condition of the process of street foods led low-income populations to nutritional and microbiological risks exposure. Studies on social determinants of street food consumption are still scarce.

This study aims to understand the socioeconomic determinants of food purchase and consumption in low-income populations in Kampung Melayu district in East-Jakarta.

A mix of complementary qualitative methods (30 in-depth interviews, 4 focus group discussions - 32 persons, and 3 months of ethnographic work) were held amongst working and not working residents (18 to 60 years old) of a Kampung Melayu, a low-income district in Jakarta.

The results show that housewives are reluctant towards home cooking, expressing their preference for the convenience provided by the street food offer. Income is received daily and is dependable: housewives allocate an amount of money to each member in order to manage the household economy. Individuals choose among the large and cheap offer of ready-to-eat foods outside the home.

In another hand, informants do not perceive a direct relationship between the food they eat and their health status. Nonetheless, they manifest to feel afraid of some ingredients such as industrial coloring and preservatives and they find cleanliness in the cooking process to be very important. They are also aware of some key nutritional guidelines even though they do not follow them daily. Thus, they develop strategies to assess the quality of the food they purchase from street vendors: based on social interactions, established routines, economic factors and comparisons with the vendors practices.

This study showed the importance of interdisciplinary studies when approaching eating behavior and public health. Observing household economics and the response within the community permitted a social and economic explanation of street food consumption and therefore the implications for planning and policy when approaching informal and poor settlements.
Study On Porosity Characteristic Of Recycled Expanded Polystyrene Material To Understanding Acoustic Phenomena

Iting Shofwati
Iting Shofwati; Budi Utomo, Sjahral Meizar Nasri; Alfajri Ismail
Syarif Hidayatullah State Islamic University Jakarta Indonesia
iting_shofwati@uinjkt.ac.id

The impacts of an increased amount of expanded polystyrene (EPS) wastes as a non-biodegradable was cause pollution to the environment. The previous studies of the utilization of recycled EPS as lightweight concrete showed there was the phenomenon of the appearance of air voids in line with increasing percentage of recycled EPS. That phenomena led the idea to utilize the EPS wastes as sound absorbing material that can be applied as one of alternative ecofriendly material to control the noise hazard technically. Porosity was defined as the volume fraction of the voids in material and it was one of parameter the acoustic behavior of materials for sound absorption.

This study has investigated the effect of enhancement of recycled EPS in developing lightweight sound absorbing material as well as to utilize recycled EPS – its called BATAFOAM. The research was focused on understanding of batafoam's porosity characteristic to understand acoustic phenomena.

An experimental investigation has been carried out e batafoam's porosity – consisting of recycled EPS, fine aggregate, cement, and water. Three mixture of cement and fine aggregate as 1:4,1:6 and 1:8 were produced by replacing fine aggregate with EPS as much as 0%, 20%, 40%, 60%, and 80% of volume. Fifteen prototypes of batafoam were produced triplicate. A two-way ANOVA test was carried out to examine the effect of mixture of cement and fine aggregate and different volume fractions of recycled EPS on the porosity characteristic.

Experimental results showed that mean of batafoam’s porosity were in range of 29%-31%. The porosity increased with an increase in volume of recycled EPS as replacing fine aggregate and various mixture. The highest porosity was achieved batafoam with 60% recycled EPS. The highest porosity also was achieved batafoam’s mixture was 1:8. A significant effect of mixture of cement and fine aggregate and different volume fraction of recycled EPS and interaction both on batafoam’s porosity was found at the 0.05 level and the value of adjusted R squared was 0.827. For further studies, it is important to investigate the acoustical performance of expanded polystyrene lightweight concrete to determining its utilization as one of alternative ecofriendly material to control the noise hazard technically.
Study On Respiratory Symptoms And Ventilatory Function Parameters Among School Teachers Who Are Exposed To Chalk Dust

Sajeev. S
Sajeev. S; Mahdoom. B. W. M. A; Lankatilake. K
Department of Community Medicine, Faculty of Medicine, University of Colombo
Sri Lanka
sajeevshellvacumar@gmail.com

Pneumoconiosis is a range of lung diseases caused by inhalation of organic and non organic dust of occupational and environmental origin. The dust cause inflammation of the alveoli and interstitium and gradually damage the lungs.

Bronchitis is an inflammation of the bronchial tubes. It causes a productive cough, shortness of breath, wheezing, and chest tightness. Two main types of bronchitis are acute and chronic. Chronic bronchitis is one type of chronic obstructive pulmonary disease. The inflamed bronchi produce a lot of mucus, brings about a cough and difficulty in inhaling and exhaling. Breathing various fumes and dusts over a long period of time may also cause chronic bronchitis.

Virtually all major categories of pulmonary diseases can be caused by environmental agents and environmentally related disease usually clinically in a manner indistinguishable from that of disease not caused by such objects. It is usually revealed after an extensive occupation history taking.

1. To identify the prevalence of respiratory symptoms among teachers exposed to chalk dust in selected government schools in Colombo and Kalutara districts in the Western Province of Sri Lanka.
2. To identify the status of ventilatory function parameters among the teachers exposed to chalk dust those selected government schools in Colombo and Kalutara districts in the Western Province of Sri Lanka.

A descriptive cross sectional study done among randomly selected school teachers from government schools using blackboard and chalk in the Western Province of Sri Lanka and a control group was selected from bank officers in the same province.

An interviewer administered questionnaire was used to identify the prevalence of respiratory symptoms. Symptoms that investigated are recurrent or prolonged cough, wheezing attacks, breathlessness, episodes of pneumonia and episodes of acute bronchitis among the teachers and bank officers.

Ventilatory functions were measured among school teachers and bank officers with portable Vitelograph and Peak Flow Meter. Peak expiratory flow rate (PEFR), Forced vital capacity (FVC), Forced volume of expiration in 1st second (FEV1) and FEV1: FVC ratio are the measurements taken for investigation. Maximum value after three proper measurements of PEFR, FVC, FVE1 and FEV1/FVC each is taken for analysis.
School teachers and control group is matched according to the sex. Findings were analyzed with SPSS and stratification test was done to exclude the effects of differences in the age and Body Mass Index (BMI).

Statistically significant proportion of teachers report recurrent cough (53.4%), prolonged cough lasting more than three months (11.1%), wheezing attacks (29.1%) & breathlessness (31.25%) compared to such symptoms in unexposed bank officers. 64.9% of the teachers with cough produce sputum. 76% of the teachers with wheezing have intermittent exacerbations. Among them only 33% required at least one nebulization for symptom relief. Episodes of acute bronchitis is more among teachers (12.5%) compared to the bank officers (P<0.05). There is no significant difference in the past episodes of pneumonia among teachers and the control group.

PEFR, FVC, FEV1 and FEV1/FVC were significantly lower in teachers who are exposed to chalk dust compared with unexposed bank officers (P<0.01). The results remained the same for FVC, FEV1 and FEV1/FVC once the stratification test was done to exclude the effects of differences in age and Body Mass Index (BMI) on the ventilatory function parameters.

Adverse respiratory symptoms such as cough, wheezing attacks, breathlessness and episodes of acute bronchitis are common in teachers. Respiratory function parameters such as PEFR, FVC, FEV1 and FEV1/FVC are affected among the teachers. These above respiratory symptoms and changes in the ventilatory parameters in teachers may be caused by the exposure to chalk dust.

The chalk dust exposure increases the frequency of respiratory symptoms and changes in the ventilator parameters among teachers according to our research study. Therefore the chalk dust exposure play a role in the progressive lung damage and may be one of the causes for pneumoconiosis or occupational lung diseases.

Further research studies are needed to identify specifically the type of lung damage whether it is restrictive / obstructive / combined lung disease caused by chalk dust exposure. It is advisable to prevent chalk exposure among teachers by replacing black board and chalk with white board markers in schools still using black board and chalk for school teaching activities.
Survey Of Ear Plug Usage Among El Tari Airport Kupang's Ground Handling Workers In 2012

Primus Mitaran
Primus Mitaran
Universitas Indonesia
Indonesia
primusmitaran@yahoo.com

Occupational health is an important aspect to maintain, protect and promote the health status of workers working in high risk work places. Identifying the priority of high risk areas before attempting to conduct preventive actions is crucial to increase the program affectivity. One of high risk areas at El Tari airport is the apron site. Noise level examination conducted by Kupang’s Port Health office in 2010 showed that the noise level at apron area were 92.2 dB in the day time and 95.2 dB in the morning time (Talan, et al. December, 2010). Workers working in the apron area are obligated to use the ear plug/ear muff by Indonesian Law number 1, 1970 on safety work. The Indonesia Ministry of Health regulation number 356, 2008 on the organization arrangement and working mechanism of Port Health office in Indonesia anointed Port Health office as the bearer of controlling the occupational health in ports. Therefore, Kupang Port Health office conducted a survey aimed to identify the proportion of ground handling workers with proper usage of ear plugs in the apron area of El Tari Airport Kupang in 2012. The survey believed to provide accurate information to the labor company, Angkasa Pura Inc. of Kupang, Kupang City Labor and Transmigration Office and Kupang Port Health Office. Kupang Port Health office as the airport health administrator should works side by side with El Tari Airport Kupang management, the Labor Company, the Labor and Transmigration Office in building and designing occupational and safety programs.

The purpose of this survey was to identify the proportion of ground handling workers who did not use ear plug under working on apron area at El Tari Airport Kupang in 2012

This survey was a descriptive research using cross sectional design study. The samples of this research were the ground handling staffs worked in apron area of El Tari Airport Kupang 2012. The
samples chose by simple random sampling. The amount of minimal samples needed was 96 respondents. Data was collected using questionnaire to gain primary data and observation to compare the respondents answer with the real condition. This research use ‘univariat’ analysis (frequency distribution).

The survey found out that most of the workers did not use ear plug during their working hours. There were 91 respondents out of 96 total respondents or 94.8% workers did not use ear plugs. The reason behind this was that they did not have the ear plugs, as stated by 82.4% of the workers that did not use the ear plugs. While 17.6% of them stated that they bought their own ear plugs but their ear plugs were broken. The survey also revealed that 75% of the respondents had been working in the apron site for more than 3 years.

These ground handling workers worked in apron site were classified as a high risk group to suffer hearing impairment. The duration of their worked as ground handling at apron area has also increased the risk. The high noise level (> 85 dB) and duration of exposure to it are risk factors of hearing impairment occurrence. Therefore, using the personal protection equipment such as ear plug/ear muff is crucial to reduce the risk hearing impairment occurrence. The usage of personal protection equipment enabled ground handling workers to work healthy and safely. It is an important follow up program to perform an evaluation of the hearing status of workers using the audiometric diagnostic test.
Survey Of Noise And Vibration Health Impacts From Blasting Activities Nearby Coal Mining Site In South Kalimantan

Robiana Modjo
Robiana Modjo; Sjahrul M. Nasri; Desy Sulistiyorini
Universitas Indonesia
Indonesia
71.bian@gmail.com

Blasting activities on the rock layer is one of important activities in the mining process to obtain the coal under the hard overburden layers. In these operations, the noise and vibration generated from blasting activities might give effect to the health and well-being of the people who inhabit nearby the coal mining sites.

This study mainly focused on the impact analysis of noise and vibration resulting from blasting activities in the 4 villages nearby a coal mining site in South Kalimantan province. This study aimed to picture the impacts that resulting from blasting activities due to coal mining activities and to describe the community perception on the effects of the noise and vibration on their well-being.

This was a cross-analytical study focused on the perception of the people residing nearby the coal mining site about the noise and vibration impacts resulting from blasting activities. A descriptive study on community perception was conducted to describe the people opinion about noise and vibration and their experiences on the noise and vibration effect to their health and well-being. Noise level was measured with sound level meter and to be compared and evaluated based on relevant regulations in Indonesia. In addition, the vibration level was measured by using accelerometer or seismometer and the measurement results were compared to the standard from the Indonesian Ministry of Environment. Perception survey was conducted to respondents from the people in the 4 villages nearby coal mining site.

Based on the evaluation of the noise and vibration measurement results, the noise and vibration level resulting from the blasting activities did not increase the noise and vibration level in the community. The perception survey and further observation indicated that the disturbance on noise and vibration did not come from blasting activities. Most of the people from the 4 villages had perception that they did not experience noise and vibration in their daily life. However, the people who had perception that the impact of noise and vibration on health and well-being such as emotional effects, sleeping disturbance, and hearing loss thought that the noise and vibration mostly comes from the highway traffic. The value in terms of well-being of the people resulting from noise and vibration should be well-established. Further study should investigate whether people's perception on noise and vibration within their environment might be affected by the physical and mental state such as cognitive, emotional, and behavioral coping strategies, and their sense of amenity.
Sustainability Of Donating Blood Through Blood Community Volunteer Model In Nusa Tenggara Timur

John Th. Ire

John Th. Ire (1), Asnawi Abdullah (1,2), Idawati Trisno (1), Louise Simpson (1), Henyo Kerong (1), and Krishna Hort (1,3)

Australia Indonesia Partnership for Maternal and Neonatal Health (AIPMNH), Kupang, NTT (1); Department of Biostatistics and Population Health, Faculty of Public Health, University Muhammadiyah Aceh, Banda Aceh, Indonesia (2); Nossal Institute for Global Health Indonesia

Asnawi.Abdullah@fkm.unmuha.ac.id

In provinces with higher rates of maternal mortality and road accidents, such as Nusa Tenggara Timur (NTT) adequate supplies of blood for transfusion are essential. However, shortages of blood supplies are a common phenomenon. The current model of donating blood in NTT (and elsewhere) that is reliant on periodic campaigns and events does have weaknesses. A sustainable blood donor model was needed and in 2012 the concept of Komunitas Relawan Donor Darah (community of volunteer blood donors or KRDD) was developed and implemented in several NTT districts. A study was needed that examined to what extent the model is sustainable and suitable for replication to other parts of Indonesia.

To explore how the model of blood donating of Komunitas Relawan Donor Darah (KRDD) was initiated and developed in a number of districts in NTT and to analyse the contributing factors for sustainability of the mode.

Sustainability of the model was examined through secondary data analysis including reports on the process of establishing the KRDD, compiling numbers of potential blood donors in the database, growth in numbers of the blood donor community volunteer group and replication of the model to other districts in NTT. In addition, the process and factors associated with sustainability were explored through interviews and records of first author experiences in the program.

Communities of volunteer blood donors (KDRR) were established through six phased activities. The activities are: 1) Initial workshop with Indonesian Red Cross (PMI), community/religious leaders and those who have previously donated blood; 2) Listing of potential donors; 3) Create a management structure; 4) Develop a database of potential donors; 5) Sign a contract with potential donors including listing the benefits of routine health tests for donors; and 6) Development of a regular blood donation schedule.

KRDD was originally established in the districts of Sumba Barat and Sumba Timur in 2012 with a relatively small number of members. By June 2015, the numbers have increased to 655 and 628 permanent donors in the respective districts and these numbers have continued to grow. Now the average membership of each KRDD is approximately 400 donors. The program has been adopted by other 10 districts; Ende, Ngada, Sikka, East Flores, Lembata, Manggarai, West Manggarai, East North Central, South Central Timor and Belu. In the replication districts numbers of members has also continued to grow.
The study found a number of factors contributing to the sustainability of the blood donating program: 1. Database listing of potential blood donors. Having a database allows the program to schedule blood donation dates and times for each member of the KRDD; this ensures an adequate availability of blood supplies; 2. Each prospective donor signs a contract stating their willingness to regularly donate blood every three months. They get a reminder two weeks before their next scheduled donation, similar to loan repayment reminders commonly sent through SMS by a credit card company; 3. Every member of KRDD acts as a social marketing agent promoting the program and the benefits from the program (i.e. regular standard medical check-ups and becoming part of a new social peer group) to other community members through different social media channels. Management and social marketing/ promotion are also encouraged and supported. 4. Some activities of KRDDs have been supported and funded by several stakeholders including by CSR funds. 5. Establishing the program is the most challenging part of the program, and requires an innovator or key leader to be a role model as a push factor. 6. The program can be implemented on a relatively small budget and potentially be supported by CSR funds and religious institutions and other organisations.

The KRDD approach has successfully supplied regular quantities of blood in the implementing districts. The current approach of relying on events and direct donors may result in supplies exceeding storage in particular periods but shortages in supply at other times. Moreover, the current approach of relying on direct donors requires much time to find suitable and qualified donors. In contrast, by adopting the KRDD approach, suitable, qualified and better quality of donors are guaranteed to be available when needed. To be a member of the KRDD is now prestigious, and donating blood is becoming much more popular in these communities.
**Synthesis, Characterization And Stability Study Of Silver Nanoparticle In Ecotoxicology Media**

*Mila Tejamaya*
*Mila Tejamaya; Isabella Romer; Jamie R. Lead*
Universitas Indonesia
Indonesia
mila_tejamaya@yahoo.com

Silver nanoparticles (AgNPs) has been widely synthesized and incorporated in various products (1). Due to the increase of their commercialization, the exposure to the environment became apparent. Number of study showed the release of AgNPs from their product (2,3,4) which underpin the likely of their exposure to the environment, meanwhile number of eco(toxicology) showed their potential hazards (5). Risk, as the function of hazards and exposure, can be assessed by hazard-driven or exposure-driven approach (6) and this study focused on understanding the behavior of tightly constrained synthesized AgNPs in ecotoxicology media.

his study focused on understanding the behavior of tightly constrained synthesized AgNPs in ecotoxicology media.

Number of methods of PVP-capped AgNps synthesis was tried to generate a monodisperse AgNPs. Then the particles were characterized by multi-methods techniques, such as SPR analysis, DLS, FI-FFF and TEM. The behavior and stability of AgNPs were analysed by re-characterize the AgNPs after incubated in the OECD daphnia media and its variants, and algae media (Bold Basal Medium), and was compared with the behavior of citrate-capped AgNps in the same media.

A monodisperse PVP-capped AgNPs were synthesized, with TEM size ±10nm. It was shown that the PVP-capped AgNPs was very stable in all media, with minimal SPR alteration although the hydrodynamic size increased significantly. Slight increase of TEM core size was also found due to incubation in OECD daphnia media. However, it was shown that PVP-capped AgNPs exhibited better stability than citrate-capped AgNPs, suggesting promising application of this AgNPs in ecotoxicology study.
Tailoring And Testing The Effectiveness Of Sms Reminders To Improve The Treatment Adherence Of Tb Patient In Sleman District, Yogyakarta

Dewi FST
Dewi FST; Sudiyo; Risma W; Ema; Purwanta; Supriyati; Firda UA; Utarini A
Public Health Department, Faculty of Medicine, Universitas Gadjah Mada
Indonesia
fatwasari@ugm.ac.id

A TB patient is demanded to have a high commitment for long term treatment. This condition results on high drop out rate due to noncompliance. Most of people in Indonesia are familiar with SMS utilization on their cell phone. To minimize the drop out rate from TB treatment, a reminder system through SMS is potential, especially for TB patients in the intensive treatment period who should take daily medication.

This study aims to describe the cell phone utilization, to explore expected messages to remind medication, to tailor and pre-test messages for SMS reminders, and to measure the effectiveness of SMS reminders in improving adherence of medication taking.

A mixed method of qualitative and quantitative study was done. Some in-depth interview and focus group discussion (FGD) were held to describe the cell phone utilization of the TB patient and to explore expected messages to remind medication taking. A quasi-experimental study was done to compare the effectiveness of SMS reminders in improving adherence of medication taking in intervention group compare to the control group. The respondents of control group were selected from the newly diagnosed patient during Mei-June 2014, while the intervention group during November 2014-April 2015. An SMS were sent everyday during the intensive treatment period to the intervention group. Treatment adherence was measured by counting the day to finish the drug taken from the medical record.

Most of TB patient are familiar with SMS utilization on their cell phone except elderly. There were three different psychological conditions experienced by a TB patient during intensive treatment: 1) upset condition, 2) high motivated and 3) low motivated conditions. Fifty messages were tailored based on those psychological condition and pre tested to some TB patients. There were 30 respondents recruited in the control group and 54 in the intervention group. Respondents of the intervention group had higher adherence to take medication compared to respondents of the control group with p<0.05 after controlling the side effect of treatment as a confounding variable.

Everyday SMS reminders are effective to improve the treatment adherence of TB patient during intensive period. The messages should be well prepared to adapt the psychological condition of the patient.
Majority of TB cases (75%) are belong to productive age. Controlling TB through workplace can reach millions of productive age. Since 2008, Yayasan Kusuma Buana implemented TB Control in a garment factory with 6000 workers in Rancaekek - Sumedang (West Java, Indonesia). With strong support by the management of the factory, YKB were given access to reach the workers and trough nearby YKB clinic workers' spouses and family members identify TB suspect.

To decrease TB prevalence among workers and their family member

Started by conducting series of health education for the workers to create awareness on the danger of TB and followed by identifying suspect TB cases for BTA examination or other method such as x-ray or Mantoux test (for children). Positive cases are treated using TB medicine provided by Sumedang District Health Office through Cimanggung Health Center. TB examination and treatment are following National Guidelines for TB Control. Workers with TB are given sick leave for 1 - 2 months. Medication are continued by providing TB medicine in the factory clinic supervised directly by the supervisors and management of the factory. Management assigned workers undergoing treatment to the morning shift.

During 6 year period (2008-2014), a total of 266 TB suspect were identified (workers and its spouse and children). After BTA and other examinations, a total of 92 cases were positively identified as TB and given treatment. Out of those 92 cases, 42 are workers or its spouses (46%) and 50 are children (54%). All cases are treated successfully.

This experience showed that through workplace we can identified and treated TB cases not only among workers but also their spouses and children. More TB control in the workplace should be implemented not only in Indonesia but also in other countries.
The Analysis Of Heat Stress Exposure And Subjective Complaints Among Laundry And Kitchen Workers In Crowne Plaza Hotel Jakarta 2015

Anisa Sarah Andriyari
Anisa Sarah Andriyari; Hendra
Universitas Indonesia
Indonesia
asandriyari@gmail.com

Two of every 1000 workers are at risk of heat stress exposure (NIOSH, 2013). A number of 13 heat-related deaths occurred during 2012-2013, two of which took place in a laundry (CDC, 2014).

In Indonesia, a similar study conducted by Astiti (2014) shows that more than 50% respondents experienced feeling thirsty; feeling tired; sweating profusely; and feeling uncomfortable, which are the indication of dehydration, and heat exhaustion.

It is necessary to conduct a study about the heat stress exposure and subjective complaints among laundry and kitchen worker in Crowne Plaza Hotel Jakarta as the workers are at risk of heat stress exposure. The initial observation shows that subjectively, the area they work in is categorized as a hot area, they work using machine and tools radiating heat, and they have moderate to heavy workload. Last but not least, the existing control such as exhaust did not function effectively.

This study aims to explain the overview of heat stress incidence among workers in the laundry and kitchen area Crowne Plaza Hotel Jakarta, and the subjective complaints that are experienced by workers.

This study, conducted from November 2014 June 2015 in Crowne Plaza Hotel Jakarta, used observational method with cross-sectional study design. 105 workers from laundry and kitchen area become the respondents.

Indoor WBGT index, humidity, and air velocity was measured at 22 points using Thermal Environment Monitor Quest Temp 34° for 15 minutes at each point. VelociCalc TSI 9515 measures air velocity. Workload of respondent was calculated using NIOSH estimation of metabolic heat table. Work-rest regimen uses a standard from Permenakertrans No. 13 Tahun 2011, and work clothes uses a standard from ACGIH (2014). Heat stress incidence was determined by comparing the measurement result to Permenakertrans No. 13 Tahun 2011. Subjective complaints are obtained through a questionnaire consisting 20 questions of complaints which are experienced by the workers. Univariate analysis is conducted to see the distribution of heat stress and subjective complaints. Bivariate analysis is conducted to see the distribution of subjective complaints based on the heat stress incidence.

Work-rest regimen for the respondent is 75% - 100%. According to Permenakertrans No. 13/2011, the permissible heat stress exposure TLV for 75% - 100% work-rest regimen is 31.0°C for moderate workload, and 28.0°C for light workload. There is no TLV for heavy workload because with 75% - 100% work-rest regimen, workers are not permitted to have a heavy workload. However, there is a respondent in Beranda kitchen who have heavy workload with 75% - 100% work-rest regimen.
This study shows that among 105 respondents, 12 (11.4%) are exposed to heat above the TLV, those are respondents who have moderate and heavy workload in: 1. Pressing area in laundry (1 respondent); 2. Asian cooking area in Beranda kitchen (7 respondents); 3. Steward in Beranda kitchen (1 respondent); and 4. Cooks in Banquet kitchen (3 respondents).

This study shows that as many as 91 respondents (86.7%) feel the temperature in their working environment is hot, and as many as 78 respondents (74.3%) feel uncomfortable with the temperature. Respondents complaints regarding the environmental temperature is in line with the results of the measurements of working environmental climate that show the value of the average heat index is ranged between 26.94°C (80.49°F) to 40.19°C (104.34°F). According to the NSIS, heat index in that range has the potential to cause fatigue or heat exhaustion.

Bernard (2002) states that heat exhaustion is the most frequently encountered disease caused by heat exposure. Signs and symptoms of heat exhaustion are tired; weakness; blurred vision; dizziness, headache; high pulse rate; sweating; low blood pressure and stagger. The result of this study shows that as much as 91.4% of respondents sweat profusely; 50.5% feel dizzy or lightheaded; 59.0% feel weak; 67.6% feel tired; 38.1% experience rapid heart rate; and 28.6% losing balance. Based on the frequency and percentages, it can be concluded that the signs and symptoms of heat exhaustion are felt significantly by workers.

When workload increases, the body's need for oxygen will also increase. This can result in an increased pulse rate and an increased core body temperature followed by a decrease in the ability of muscles to maintain high working level without experiencing fatigue (NCDOL, 2011).

In line with this theory, the respondents with moderate workload, which is also the respondents who experienced heat stress, had a higher percentage than the group that did not experience heat stress on the complaints of sweating profusely (91.7%: 91.4 %); fatigue (66.7%:58.1%); feeling uncomfortable at work (66.7% : 54.8%); lack of concentration (66.7%: 47.3%); dizziness or light-headedness (58.3%:49.5%); rapid heart rate (50.0%:36.6%); feeling restless at work (41.7%:40.9); skin feels hot (41.7%:36.6%); losing balance (33.3%:28.0%); feeling faint (33.3%:9.7%); and skin feels dry and pale (25.0%:22.6%).
The Association Between Meditation And Some Characteristics Of Mental Status Among Medical Students In Western Province Of Sri Lanka.

Jinesh Padmaka Silva
Jinesh Padmaka Silva ; M W Gunathunga
Health Education Bureau, Ministry of Health, Sri Lanka.
Sri Lanka  
padmakasilva@gmail.com

With the sudden change in the environment and academic demands, stress levels among medical students can become higher than the ordinary citizens. The present survey aims to determine the association between meditation and some characteristics of mental status among medical students. To determine the association between meditation and some characteristics of mental status among medical students in Western Province of Sri Lanka.

A Cross sectional comparative study was conducted to describe the association between meditation and certain characteristics of mental status of medical students of Colombo, Sri Jayewardenapura and Ragama medical faculties. A group of medical students practicing meditation (number of participants 75) was compared with a similar number of sex matched group of medical students who did not practice meditation (Post test). Those willing to participate were chosen using snow ball technique. Meditators should have practiced meditation at least 15 minutes per day and at least 3 days per week for a minimum of 3 months from the date of commencement of the study. Comparison group has not practiced meditation during past 3 months. A previously validated self-administered questionnaire with a visual analogue scale was used as the study instrument to measure certain characteristics of mental status. This questionnaire originally had two parts. Part one comprised of questions on age, sex, marital status and meditation status. Part two comprised of 16 questions related to mental health status with a visual analogue scale.

There were 150 students who were enrolled in this study. Seventy five students from all three faculties were found to be practicing meditation. Another 75 students were selected from all three faculties as the control group. The control group of students had not practiced meditation during the last three months. Though there may have been more students who would practice meditation only 75 were identified with the sampling technique used. (Snow ball technique).

Of those 92 who felt very happy during last week, 53 (60.9%) were practicing meditation. Of those 132 medical students who have higher “Loving kindnesses towards others 70 (53%) have meditated. Of those 32 with good anger control only 27 (>84 %) have practiced meditation. Statistically significant associations for meditation were revealed for anger control and happiness at p<0.05 level.

Following the study it could be concluded that Meditation may contribute towards “Happiness, “Anger control and “Loving kindness towards others among medical students.
The Association Between Personal, Environmental And Behavioral Factors With Premarital Sex Among Indonesian Adolescents In 2012

Nadia Khafia
Nadia Khafia; Renti Mahkota
Department of Epidemiology, Faculty of Public Health, Universitas Indonesia
Indonesia
renti.mahkota@gmail.com

Premarital sexual behavior in adolescents is a serious problem with regard to the transmission of sexually transmitted infections, abortion, disability and infant mortality in poor countries (Glaciers, et al 2006).

This study assess the association between personal, environmental, and behavioral factors with premarital sex among Indonesians adolescents in 2012 using data from Indonesia Demographic Health Survey-Adolescent Questionnaire in 2012.

A cross sectional study was conducted among 8,123 unmarried men and women aged 15-24. Multivariate logistic regression models was carried to identify the dominant variable related to premarital sex in adolescents. The results found that some factors associated with premarital sex among adolescents are the male gender (OR= 1.6; 95% CI= 1.196-2.321), age 20-24 years (OR= 2.4; 95% CI= 2.07-2.999), high permissive attitude toward sexuality (OR= 10.05; 95% CI= 7.859-12.871), the high effect of friends (OR= 4.2; 95% CI= 2.712-6.575), smoking behavior (OR= 1.81; 95% CI= 1.408-2.340), alcohol consumption (OR= 3.5; 95% CI= 2.770-4.537), and drug use (OR= 2.7; 95% CI= 2.003-3.818).

Attitudes of sexuality become the dominant variable related to premarital sex in adolescents. Therefore, a comprehensive reproductive health education for adolescents is needed to avoid misperception on attitudes toward sexuality that makes adolescents feel free to engage in premarital sex.
The Burden Of Out-Of-Pocket (Oop) Payment: An Experience From The First Year Of Indonesia's Uhc Implementation

Pujiyanto

Pujiyanto
Faculty of Public Health, Universitas Indonesia
Indonesia
puji.fkm@ui.ac.id

By the year 2014 Indonesia launch Universal Health Coverage called JKN program (Program Jaminan Kesehatan Nasional). JKN program was run by BPJS Health. The vision of BPJS Health is to cover all Indonesian by the year 2019. Theoretically JKN program covers all medically services need by its members and pay hospital services with prospective payment called INA-CBGs (Indonesian Case Based Groups). While JKN program applies INA-CBGs payment to pay healthcare services providers, JKN members still pay (significant) out-of-pocket (OOP) expenses, among other, to cover the price differentials between those reimbursed by BPJS Health and the actual costs incurred.

The objective of the study is to assess the incidence and the amount of out-of-pocket (OOP) expenses among JKN members that use inpatient services and the burden of that OOP expenses to household income.

A survey was conducted in 22 hospitals currently contracted by BPJS Health. The 22 hospitals located at six provinces out of 34 provinces in Indonesia and representing entire six regions of INA-CBGs different tariffs.

The population of the survey were the JKN members who are being hospitalized. The sample were members who are using inpatient hospital services on two weeks periods of March and April 2015. Information of JKN members (demographic information, socio-economic information, and types of JKN group) were collected by interviewing a member or his/her family who are hospitalized.

The interviewer were students of the school of public health in the capital city of the province. One of the research team went to the capital city of each province and train the interviewers. Data gathered were sent to the research team. Then the data were entry using CSPro by a separate data entry team.

The number of sample were 889 patients. The sample mostly come from general hospital (676 patients) and the least come from cancer hospital (26 patients). In term of JKN membership category, the patient mostly were salaried employees (PPU category) and non-workers (BP category).

The out-of-pocket (OOP) incidence was 16.8%. The types of OOP expenses mostly for drugs purchased outside hospitals 8.3% followed by miscellaneous expenses 5.5%, drugs purchased inside hospitals 4.8% and administration cost 1.3%.

The average OOP expenses were IDR 1,111,673 and the median was IDR 230,000. The most expensive driver of OOP expenses was miscellaneous cost with average cost were IDR 1,866,830 and
the median was IDR 500,000 and followed by drugs purchased inside hospitals with average cost were IDR 1,056,528 and the median was IDR 150,000.

The average OOP expenses equal with 79.4% of monthly household head income. The higher average OOP expenses appear when the member of JKN hospitalized at cancer hospital (335.4%), hospitalized in the Province of Jakarta (160.3%) and the first quartil income group or the poorest group (199.8%). It means that for the poorest, the burden of OOP expenses spent two months of household head income.

The burden of OOP expenses could also measured by catastrophic expenditure. The catastrophic expenditure was measure by OOP expenses more than 40% of monthly household head income. There were 21.5% household burdened with catastrophic expenditure. The incidence of catastrophic expenditure were higher if the patients hospitalized at cancer hospital (31.8%), hospitalized in South Kalimantan Province (29.6%), the household head has no education (33.3%) or elementary school (30.4%), the household head work on agriculture (44.0%) and the first quartil income group or the poorest group (34.3%). It means that one-third of the poorest patients were pushed to be poor caused by OOP expenses more than 40% of monthly household head income.

The result of the study mentioned above proof that the household member of JKN program was burdened with OOP expenses when they are hospitalized. This was against toward the JKN program design which covers all healthcare services need by its members to reduce the burden of household member.

Based on the above discussions, we suggest the need of two study. First, a study on OOP expenses, whether they caused by lower rate of INA-CBGs payment or moral hazard of hospitals in order to get more money from JKN members. Second, a study on economic price of INA-CBGs payments.
The Effect Of Abolishing Beer And Wine Tax In Hong Kong: A Literature Review

Greta Chun-Huen Tam
Greta Chun-Huen Tam
Chinese University of Hong Kong
Hong Kong
gretatam00@gmail.com

While alcohol consumption in Hong Kong is low compared to their mainland China and Western counterparts, consumption is still greater than that in Singapore and Japan. The abolition of the wine and beer tax in 2008 has been a cause for concern. Alcohol consumption per capita has risen since abolition of the tax, from 2.53-2.64 liters of pure alcohol per person per year in 2004-2007, to 2.6-2.87 liters per person per year in 2008-2014. Given that alcohol consumption per capita is closely linked to alcohol dependence and the prevalence of alcohol-related harm at the population level, the rise in consumption is worrying.

To provide a literary review of alcohol consumption in Hong Kong, factors and outcomes associated with it and current trends of underage and binge drinking. Existing policies are reviewed, with recommendations made. To review the trends of alcohol consumption in Hong Kong, a literature search for peer-reviewed articles, using PubMed was performed. The search terms alcohol use, epidemiology, Hong Kong, prevalence and risk factors were used. A total of 109 articles were identified and initially screened. Only English language articles were included. Reference lists of articles were reviewed to identify any relevant articles. 11 articles were chosen. Only those articles relating to alcohol consumption in Hong Kong were included. The same search was conducted in the Cochrane Library, but yielded 1 result that was not relevant to Hong Kong.

Similarly, a search for research papers on policy was done using intervention AND alcohol and Hong Kong. Although there were 35 results, none of them were related enough to the topic. For information regarding Hong Kong policy, Hong Kong government documents were reviewed. Following the abolition of wine and beer tax in 2008, the increase in consumption of these two types of alcohol is a cause of major concern. Two major groups in the population are at risk of increased consumption: underage and binge drinkers. As wine and beer are the major preferred drinks of these risk groups, measures need to be taken to counteract this trend. The enforcement of random breath testing in 2009 and the subsequent drop in drink-driving accidents is evidence that effective policy makes a huge difference.

The Hong Kong government is considering re-instating the wine tax. In view of the findings in this study, it would be wise to do so. Other measures to curb alcohol consumption targeting at-risk groups should be implemented. To curb underage drinking, enforcement of minimum legal age for alcohol purchase and restriction of alcohol advertising and outlet density and hours of sale would be effective. To curb binge drinking, alcohol interventions targeted at service industry workers and incorporated into smoking cessation programmes might be effective. Furthermore, screening and brief intervention guidelines for emergency departments would enable healthcare professionals to screen and treat binge-drinkers.
The Effect Of Sexual Sensation Seeking On Aids Related Knowledge, Attitude And Behavior Among Young Men Who Have Sex With Men.

Gao meng-ting
Gao meng-ting
Wuhan university® china
china
xfbtting@163.com

Young Men who have sex with men (YMSM) have accounted for an alarmingly increasing proportion of nationally reported acquired immune deficiency syndrome (AIDS) cases. Interventions aimed AIDS prevention among YMSM generally range in intensity from a single session of HIV/AIDS education to multiple sessions of risk reduction counseling and skills building. Although these interventions can produce substantial increases in knowledge, the effects in risk sexual behavior are modest. Existing intervention only emphasized the role of knowledge and attitude in changing behavior, ignoring personality characteristics.

Sexual sensation seeking (SSS) is an important factor related to risk behavior. A hallmark of the cognitive developmental stage of YMSM is concrete thinking. Given this developmental stage, YMSM are often impulsive and rebellious, and unable to conceptualize the future risk associated with their high-risk activities. Numerous studies have confirmed the relationship between SSS and risk behavior among MSM. To our knowledge, there has not been a quantitative research on sexual sensation seeking among YMSM in China, its impact on AIDS-related knowledge, attitude and behavior is not clear.

This study aimed to access AIDS-related knowledge, attitude, and behavior among YMSM in China, and to examine its associations with sexual sensation seeking.

From March 2013 through December 2013, with the help of Xinyuan group, we recruited men in Wuhan, China for a cross-sectional interview. We recruited men by routine activities, respondent-driven, and internet dissemination. MSM were included in the present study if they 1) were male; 2) were 25 years of age or younger; 3) reported having homosexual intercourse at least once during the prior 6 months and 4) had written informed consent. A total of 422 YMSM enrolled in the study, and 403 of them met the inclusion criteria.

Participants completed a questionnaire that collect information about demographic characteristics, AIDS-related knowledge, attitude and behavior, Sexual sensation seeking. SSS was measured using a validated sexual sensation seeking scale (coefficient alpha=0.75) by Kalichman. Internal consistency of the scale in this sample was good (coefficient alpha=0.89).

Only data of YMSM who had completed sexual sensation seeking scale were included in the analyses (N=373). EpiData 3.0 software was used to input the original data and SPSS 19.0 was used for data analysis. Descriptive analyses were conducted to describe demographic characters and sexual sensation seeking status of the sample. Chi-square tests were conducted to know the differences in AIDS-related knowledge, attitude and behavior between different levels of SSS. Multiple sexual partner, one night stand, unprotected oral intercourse and unprotected anal intercourse were
regarded as the most important factors transmitting AIDS. Logistic regressions were conducted to examine the effect of SSS on AIDS-related behavior, and adjusted for demographic characters, knowledge and attitude.

Two-third of the YMSM gave the correct answer about condom use, but correct responses regarding oral intercourse (38.2%) and anal intercourse (21.2%) were low. One-third of the participants attitude towards AIDS were irrational or unsure, 42.6% self-assessed the likelihood of HIV infection was very small, and 9.7% were unsure. This study reported low levels of AIDS-related knowledge, attitude and high levels of risky sexual behavior, which are inconsistent with the results of previous study. The majority of the previous study in China evaluated AIDS-related knowledge according to the standard of China AIDS monitoring and evaluation framework, thus showed the awareness rate of AIDS-related knowledge is 90% or above. Items in framework focused on HIV transmission and prevention, ignoring the specific prevention measures, which resulted in the awareness of AIDS-related knowledge are high. However, in this study, we divided AIDS-related knowledge into 3 sections, including condom use, oral intercourse and anal intercourse. Data in this study indicates that YMSMs knowledge level about oral intercourse and anal intercourse need to be improved, suggesting that discrimination and stigma among YMSM induced they isolated from education system, hindered their access to knowledge. Consistent with previous research, we found YMSM tend to underestimate the susceptibility to HIV infection and are more likely to engage in risky sexual behavior.

HSSS was associated with lack of condom use (OR=25.711, P<0.01), anal intercourse knowledge (OR=8.475, P<0.05), irrational attitude towards AIDS (OR=19.621, P<0.01), and negative attitude towards condom (OR=45.006, P<0.01). High sexual sensation seekers were significantly more likely to engaged in one night stand (OR=27.169, P<0.01), multiple sexual partners (OR=12.280, P<0.01), group sex (OR=12.524, P<0.01). LSSSs were more likely to insisted on condom use during oral intercourse (OR=7.376, P<0.05) and anal intercourse (OR=21.468, P<0.01), also insisted on condom use after drinking (OR=8.438, P<0.05) and substance abuse (OR=9.700, P<0.01).

After adjusting for AIDS-knowledge, attitude, and demographic characteristics in Logistic regression, HSSS remained significantly associated with one-night stand (OR 5.13, 95%CI 2.31-11.40), multiple sexual partners (OR 2.81, 95%CI 1.31-6.03) and unprotected anal intercourse (OR 3.67, 95% CI 1.24-10.93). Findings suggest that high sexual sensation seeking is an independent risk factor for YMSM risky sexual behavior, and HSSSs are at high risk and require more intervention efforts.

In conclusion, the results of this study fill a gap in the YMSM and HIV literature on sexual sensation seeking and its effect on AIDS-related knowledge, attitude and behavior. YMSM of high sexual sensation seeking are more likely to have incorrect knowledge, negative attitude, and risky sexual behaviors, thus also indicate that HSSSs are high-risk population that should be a focal point for AIDS interventions. Whats more, intervention measures should be implemented according to their psychological characteristics in particular of their sexual sensation level. For example, health education towards HSSSs should be novel and thrilling, with diverse approaches, while health education towards LSSSs or MSSSs should be familiar and mildest, with simple approaches.
The Effect Of Zink Supplementation Sperm Number And Motility In Mice (Mus Musculus) Balb/ C

Widya Fadila
Widya fadila
Universitas Indonesia
Indonesia
Widyafadila1@gmail.com

WHO estimates that approximately 8-10% couples worldwide experiencing infertility problems. One of the success of the fertility process is influenced by the quality of spermatozoa, thus spermatozoa quality improvement efforts are needed. In men with low fertility level, Zinc supplementation can increase the number and motility of sperm.

The purpose of this study was to determine the effect of zinc supplementation sperm number and motility in mice (Mus Musculus) BAIlb/c.

This study is an experimental research laboratory with study of design Post Test-Only Controled Group Design at 24 mice BAIlb/c zinc given for 34 days. Mice were divided into 3 treatment groups (P1, P2, P3) and the control group (K). Supplementation has been given orally at a dose of P1 0.026 mg/day, P2 0.052 mg/day and 0.078 P3. On the day of 35th examined amount and motility of sperm. Different test in sperm count used the Kruskall Wallis with a value of 0.001 (p <0.05) there is a significant difference sperm number between 4 groups. And Then followed by Mann-Whitney

Test showed a significant difference between K and P1, P2, P3. No significant difference in P2 with P3. Motility of different test is used ANOVA. with a value of 0.035 means that there are significant differences. Followed by LSD tests showed significant differences in motility of spermatozoa only on K for P1 and P1 to P3. While the other treatment groups showed no significant differences inmotility.
The Effects Of Non-Compliance Appointment Of Taking Antiretroviral (ARV) To 3 Years Survival Of Patient With HIV/AIDS At The Infectious Diseases Hospital Prof. Dr. Sulianti Saroso In 2010-2012

Hendra Dhermawan Sitanggang
Hendra Dhermawan Sitanggang; Tri Yunis Miko Wahyono; Mondastri Korib Sudaryo; Adria Rusli
FKM UI
Indonesia
hendra_sitanggang88@yahoo.com

Dramatically, Anti-Retroviral drug Therapy (ART) has reduced morbidity and mortality of People Living with HIV/AIDS (PLWHA). However, adherence to antiretroviral therapy has become a challenge because this therapy must be endured for a lifetime. Adherence to antiretroviral therapy is one of the factors that determine the success of treatment. One part of adherence of ART is compliance appointments of taking drugs. Assessment to this compliance is easily monitored regularly and is also associated with the success of treatment

The objective of this study was to determine the effect of non-compliance of taking Antiretroviral to the 3-years survival of patients with HIV/AIDS.

This study used a retrospective cohort design and to be analyzed with survival analysis. Sample size in this study were 164 patients with HIV/AIDS at RSPI Prof. Dr. Sulianti Saroso in 2010-2012. This study was analized using cox regression.

The cumulative survival probability of patients with HIV/AIDS at RSPI Prof. dr. Sulianti Saroso in the second year (24th month) was 95.6% and the third year (in the 36th) was 91%. Multivariate analysis with Cox regression showed that non-compliance appointments affected to the 3-years survival of patients with HIV/AIDS, after controlled by opportunistic infection, age and initial CD4 count (aHR = 2.456; 95% CI: 0.802 to 7.518).

Non-compliance appointments of taking ARV in the first year was assumed describe health behaviors associated with an increased risk of death. In addition, it also showed non-adherence of ART during follow-up, which can caused to failure the suppression of viral replication, thus increase the possibility of HIV virus mutations that can lead to drug-resistant and ultimately increase the risk of death. Non-compliance appointments of taking ARV can be used as a marker to identify the risk of developing poor health in the future among patients with HIV/AIDS.
The Emerging Risk Of Used Lead Acid Battery To Human Health In Indonesia

Dr. Budi Haryanto
Dr. Budi Haryanto
Faculty of Public Health, Universitas Indonesia
Indonesia
bharyant@cbn.net.id

In Indonesia, more than 200 illegal used lead acid battery (ULAB) smelters currently found. Only a few of health study supported the finding of its lead-related symptoms and diseases among population living at surrounding the smelters.

To assess the blood lead levels (BLLs) and potential health impacts among population at surrounding ULABs recycling smelters we evaluated health effects reported from year 2003 to 2013, conducted focus group discussion to metals smelter owner/workers and a group of 35 housewives, and retook and measured BLLs.

It was found that many of children are having difficulty to get high score in their schools and having stunting or problem in physical development. The average mean of BLLs increased almost double in 2015 compared with in 2011. The risk of having hypertension, interference in ability to make red blood cell in female occurred among 24% respondents; Elevated blood pressure, hearing loss, interference in ability to make red blood cell in male (20%); Kidney damage, infertility in male, Nerve problems-decreased sensation and ability to move quickly (13%); Decreased ability to make red blood cell (20%), and; Frank anemia, decreased life-span, coma/seizures (22%). The population living surrounding area of ULABs smelters is seriously severe of having chronic health problems. It is recommended that the smelters must be closed or placed far away from the municipality.
The Feasibility Of Deliver Project For Earlier Detection Of Drug-Resistant Tuberculosis At Primary Care Setting In Bandung Municipality, West Java, Indonesia

Bony Wiem Lestari

Bony Wiem Lestari; Yoriza Sativa, Faculty of Medicine Universitas Padjadjaran Indonesia
bony.wiem@gmail.com

The MultiDrug-Resistant Tuberculosis (MDR-TB) becomes a threat for TB control in Indonesia. It poses a huge burden for National TB Programme (NTP) due to its long, expensive and toxic treatment. Diagnosis delay of MDR-TB may lead to delay of appropriate treatment which contributes to poor treatment outcomes and transmission of MDR-TB. The WHO recommends the use of GeneXpert to reduce the diagnosis delays and it is included in diagnostic algorithm. However, the effectiveness of diagnostic algorithms is influenced by local factors such as patients behavior and adherence of health care workers to the algorithm. The Deliver Project is a project funded by Ministry of Health to transfer sputum of MDR-TB suspect from Primary Health Care (PHC) to Provincial Hospital (PH) where GeneXpert is located.

to assess the feasibility of this project in terms of increasing the number of MDR-TB suspect referal from PHC to PH and MDR-TB confirm case.

We conduct a pre and post experimental study in Bandung Municipality starting from January until December 2015. All PHCs in Bandung were introduced with the Deliver Project. The TB nurse and laboratory personnel from each PHC were trained about standard MDR-TB sputum packaging. For data analysis, we considered the database recorded in 2014 as the baseline. The outcome measured in this study were number of referal of MDR-TB suspect, frequency for each MDR-TB suspect criteria and number of MDR-TB confirm case.

In 2014, there were 340 MDR-TB suspects from Bandung registered in database. On going data until July 2015 showed there has been already 354 MDR-TB suspects. The referal from PHCs in Bandung contributes 37% of total MDR-TB suspects in 2014, meanwhile, until July 2015 PHCs has identified 48% (p-value <0.05). From January until July 2015, among 171 MDR-TB suspects, 21 cases confirmed as MDR-TB with the incidence of 12.3%. We found that the most frequent criteria for MDR-TB suspect identified by health care workers in PHCs were relaps of TB cases (25.7%) and conversion failure after 2 months of TB treatment (21%).

Conclusions: The Deliver Project was successfully increased the referal number of MDR-TB suspects from PHC to Provincial Hospital. Our results shows that Deliver Project is feasible in our setting. Easier access to diagnostic facility may eventually lead to earlier diagnosis of MDR-TB cases.
The Health Literacy Surveys In Taiwan And Vietnam

Duong Van Tuyen

Duong Van Tuyen; Pham Van Thuc; Nguyen Thanh Huong; Pham Minh Khue; Truong Quang Tien; Nguyen Trung Kien; Asian health literacy association; Peter Wushou Chang

Taipei Medical University

Health literacy has been recognized with significant association with health development in different countries and communities. A comprehensive understanding of health literacy in different levels will be essential to provide better public health intervention programs.

To examine the health literacy levels of populations in Taiwan and Vietnam, and to explore the associated factors of health literacy in each country and total.

A cross-sectional study using validated HLS-EU questionnaire in the community levels in Taiwan and Vietnam through self-administration for those aged 15 and above was conducted in 2013-14. The study participants were selected by probability-proportional-to-size sampling method in Taiwan and a mixed method in Vietnam. The study population included 3,015 and 2,073 citizens from Taiwan and Vietnam respectively. The general health literacy levels and different health literacy domains were compared, while multivariate analysis was used to identify the important variables associated with health literacy in both countries.

The general health literacy in Taiwan (mean ± 1SD = 34.4 ± 6.59) was higher than that of Vietnam (29.6 ± 9.08), and 44.6% of the surveyed were with limited health literacy (health literacy index ≤ 33) in Taiwan as compared with 66.9% in Vietnam. In both countries, health literacy was significantly and positively associated with variables like the highest education attainments, their ability to pay for medication, self-perceived health status, doing regular exercise, community involvement, watching health related TV, and with company during visit to medical doctors (p < .01). On the other hands, their health literacy was significantly and negatively related to being with long-term illness, physical limitation related to health problems, and the frequencies to visit doctor over the past 12 month (p < .01). In Vietnam, the health literacy was with significant and negative association with age, but with positive association with insurance status (p < .01), which were not shown with significant association in Taiwan. With multivariate analysis, their health literacy level remained significantly and positively associated with education and ability to pay for medication (p < .01). In conclusion, Several social and personal factors were identified to be associated with health literacy in the general public in Taiwan and Vietnam. These indicated potential intervention measures can be developed to provide more effective public health programs in the region.
The Impact Of Indonesian Decentralization On Democratization In Maternal Health Policy

Dumilah Ayuningtyas
Candra Dewi Purnamasari; Dumilah Ayuningtyas
Faculty of Public Health, Universitas Indonesia
Indonesia
dumilah@gmail.com

Decentralization in developed countries is an instrument of democratization in which society as a principal can supervise bureaucracy in kontaktual relation. Decentralization make public services closer to the people, more effectively and efficiently. However, in developing countries there are many inherence factors that cause deviation towards decentralization so that inequality of access to affordable and quality health care and justice are still high. An example is the maternal health policy in Indonesia. Maternal mortality remains high after the implementation of the decentralization so that Indonesia failed to reach the MDG targets. Even in 2013 the maternal mortality ratio actually reached 256 per 100,000 live births the same height as before decentralization. Various financing schemes to improve access of the poor to the implementation of universal coverage can not decrease the maternal mortality rate

(1) Describe the various policies to control maternal mortality rate after decentralization (2) Describe the factors associated with the implementation of decentralization in Indonesia’s maternal health policy that includes aspects of (a) Environmental Policy (b) Capacity of Bureaucracy (c) Resource d) Capacity of actor.

This study was design with Descriptive qualitative approach where the researchers themselves were research instruments. Meta-analysis was used to compile a variety of sources such as a dissertation that has been published and secondary data such as Riskesdas SKRT, and so on. In-depth interviews conducted to bureaucracy in the two districts which has success and not success reduce maternal mortality. Reliability is measured by triangulation of sources by using different data sources and triangulation of methods with different data collection and analysis methods.

Health Decentralization in Indonesia failed to implement the mandate to make health care closer to the community, effectively and efficiently. This reality proved that Decentralization as an instrument of democratization does not happen in Indonesia particularly in maternal health problems. Utilization of health care facilities by women including for Sectio Caesaria proven to increase after the implementation of government health insurance for the poor, including Jampersal, as well as the implementation of Universal Coverage. But the maternal mortality rate remains high.

Policy Environment that has influenced the maternal health policy was cultural factors, lack of public patsipation, and interests between actors in the contestation of regional policy. Decision space in maternal health policy is remain low, especially related to human resources policies and financing. Bureaucratic capacity issues that have not been fulfilled in reducing maternal mortality is the weak of planning system, and the lack capacity of policy actors. This causes a variety of resource allocation is not on target, weak of policy supervision and the emergence of various policy conflicts.
in the implementation phase. This condition is aggravated by the weakness of the information systems and the lack of transparency which raises asymmetric phenomenon of information that potential to cause abuse of authority and corruption by the bureaucracy.

Various problems which exist encouraged innovation in some areas and managed to produce best practice succeeded in reducing maternal mortality. Political capacity of head of the region play an important role in guarding the policy and receive support from various political forces that exist and resolve conflicts that arise. Health policy has always been a political commodity in any local elections. The impact of this problem will be felt after the incumbent was elected. Populist policies become the priority in many areas while other fundamental problems such as high maternal mortality rate excluded in the policy contestation.
The Impact Of The Sustainable Action Against Hiv And Aids In Communities (Sahacom) Project In Prevention And Care For Hiv And Sexually Transmitted Infections Among Men Who Have Sex With Men In Cambodia

Pheak Chhoun
Siyan Yi; Pheak Chhoun; Carinne Brody; Dyla K. Pal; Khimuy Tith; Sovannary Tuot
Center for Population Health, KHANA
Cambodia
siyan@doctor.com

Globally, HIV prevalence among men who have sex with men (MSM) continues to rise, while the overall decline in HIV prevalence has been noted in many geographic regions. In low- and middle-income countries, MSM have a markedly higher risk of being infected with HIV and sexual transmitted infections (STIs) compared to men in the general population. The HIV epidemic among MSM is driven by multiple levels of complex individual, social, and structural factors. The hidden nature of MSM coupled with overlapping homosexual, bisexual, and commercial behaviors poses challenges for prevention of HIV and STIs in this key population. In responses to this growing epidemic, several community-based intervention models have been tested and proved to be effective in improving sexual and reproductive health outcomes among MSM in different settings. However, several challenges remain.

Cambodia has recently been internationally lauded for its successes in slowing down the HIV epidemic. To prevent a resurgence of HIV epidemic, intervention programs must be tailored to the needs of the key population. High coverage of the access to care and treatment for people who are tested positive for HIV and STIs must be maintained. To address these issues, the Sustainable Action against HIV and AIDS in Communities (SAHACOM) project has been implemented since 2009. This study evaluated the effectiveness of the SAHACOM in providing HIV/STI prevention, care, and support services to MSM in Cambodia.

A midterm and end-line comparisons were conducted in several expected outcome indicators. The midterm survey was conducted in 2012 with 352 MSM, and the end-line survey was conducted in 2014 with 394 MSM. A two-stage cluster sampling method was used to select the study sample from Battambang and Siem Reap provinces for face-to-face interviews using a structured questionnaire. The total number of MSM population in these two provinces represented more than 70% of the total number of MSM covered by the focused prevention programs of the SAHACOM in the country. The questionnaire was developed using existing tools adapted from previous studies in Cambodia. The outcome indicators included HIV testing and referral services, sexual behaviors and condom use with different types of partners, STI symptoms and care seeking behaviors for the symptoms, and illicit drug use. Descriptive statistical analyses were conducted to compute means and standard deviations (SD) for numerical variables and frequencies (%) for categorical variables. χ² test or Fishers exact test was used for categorical variables and paired Students t-test for continuous variables to compare socio-demographic characteristics of the respondents and key outcome indicators to detect changes from midterm to end line. Two-sided p-values <0.05 was used to
indicate statistical significance. The National Ethics Committee for Health Research, Ministry of Health, Cambodia, approved the study protocol and tools (Reference no. 082NECHR).

Socio-demographic characteristics of MSM at midterm and end line were not significantly different. Mean number of sexual partners in the past three months decreased significantly from 6.2 at midterm to 4.0 at end line (p= 0.03). The proportion of MSM who reported having paid sex with men in the past three months also decreased significantly from 19.0% at midterm to 9.7% at end line (OR= 2.0, 95% CI= 1.3-3.0). No significant change was found in condom and lubricant use rates across all types of relationships. Regarding STIs, 28.1% of MSM at midterm reported having at least one STI symptom in the past three months compared to 6.1% at end line (OR= 4.6, 95% CI= 2.9-7.4); out of them, 14.1% of MSM at midterm sought treatment compared to 20.7% at end line (OR= 2.6, 95% CI= 1.1-6.9). The proportion of MSM who reported using illicit drugs in the past three months also decreased significantly from 12.2% at midterm to 5.1% at end line (OR= 2.4, 95% CI= 1.4-4.2). However, the proportion of MSM who reported having been tested for HIV in the past six months decreased significantly from 94.1% at midterm to 77.1% at end line (OR= 2.9, 95% CI= 1.8-3.6).

Limitations of this study included the absence of baseline data, the unknown validity and reliability of the tools used in this study, the use of self-reported measures, and the possibility of recall biases as the participants were asked to recall events that had taken place over the past several months. Despite these limitations, we conclude that the SAHACOM was successful in improving several sexual behaviors and other related outcomes such as reduction of number of sexual partners, involvement in sexual intercourse with male commercial sex workers, and prevalence of STI symptoms and illicit drug use among MSM in this study. It also improved healthcare seeking behaviors of those who experienced STI symptoms. However, the programs failed to appreciably increase condom use rates in all types of sexual relationships with different partners from midterm to end line, while HIV testing rate was even declining. Future studies should explore barriers preventing condom use and HIV testing, and intervention programs should be tailored to address these issues among MSM in Cambodia.
Insecticide resistance and environmental damage as impact of application of synthetic larvicide continues, therefore it is necessarily alternative larvicide for vector control of Malaria.

The aim of the research was to find out the influence of extracts of papaya seeds and leaves (Carica papaya Linn.) to the mortality of Anopheles sp. Larvae.

The research method was experimental design with post-test only control group design. Samples of larvae of Anopheles sp. used instar III / IV were 10 larvae per container. Testing extracts (4 variation of concentration) were observed during 24 hours with three repetitions at the Laboratory of Chemistry Faculty of Science, Hasanuddin University. Further, testing of the extract was done in habitat Anopheles sp. in Tanete, Bulukumba, South Sulawesi, Indonesia.

The results indicated that extract of the Papaya seeds contains tannins and terpenoids, while the extract of papaya leaves (Carica papaya Linn.) contains flavonoids, saponins and steroids. LC50 of papaya seed extract (Carica papaya Linn.) is a concentration of 3.9% and LT50 is 5 minutes (p<0.05). LC50 of papaya leaf extract (Carica papaya Linn.) is a concentration of 2.8% and LT50 is 60 minutes (p> 0.05). LC50 of the combination of papaya seed and leaves extracts (Carica papaya Linn.) is a concentration of 2.6% and LT50 is 5 minutes (p>0.05). Habitat test indicates the effectiveness of seed, leaves and combination of seed and leaf extract for one week with Mulla reduction formulae is 100%, 91% and 100%, respectively.
The Influences Of Environmental And Household Behaviour Factors Related To Upper Respiratory Infection In Under Fives Children In Areas Located In Tamansari Bandung City

Reny Fahdiyani
Reny fahdiyani; Ardini S Raksanagara; Hadyana Sukandar
Padjadjaran University
Indonesia
fahdiyani86@yahoo.com

Upper Respiratory Infection (URI) in developing countries caused high morbidity in children under five and high absence from school among school-aged children. Indonesia Ministry of Health reported that non-pneumonia Acute Respiratory Infection (ARI) increased 2.6% from 2007 to 2011. Multiple risk factors can contribute to URI including environmental and behaviour factor.

This study aimed to investigate environmental and behaviour factors relation to URI and to find out which of the most influential factors related to URI in children under five in urban slum area.

It was case control study which conducted from February to April, 2015 among children under five located in Tamansari which is urban slum area in the center of Bandung city, West Java, Indonesia. The cases were 55 household with children under five suffering from URI who were treated in primary health care, the number of controls were twice bigger than cases selected from neighbourhood and were matched for age, sex, and nutrition status. Environmental factors were house density, humidity, ventilation, temperature, smoke disposal; behaviour factors were hand washing, maternal smoking habit, mask protection, vitamin A consumption and exclusive breastfeeding.

The result showed that environmental factors which related to URI only house density with $p = 0.033$ and OR = 2.698 (CI95% 1.084 6.715). None of the maternal behaviors factors related significantly with URI in children under the age of fives.

Reducing the household density is an important and challenging issue in urban slum area, consequently health promotion and prevention about URI is still essential to reduce the risk of this disease among children under five in urban slum area.
The Nurses' Well-Being Index And Factors Influencing This Index Among Nurses In Central China: A Cross-Sectional Study

Run-tang Meng

Run-tang Meng; Yi Luo; Bing Liu; Ying Hu; Chuan-hua Yu
School of Public Health, Wuhan University
P. R. China.
mengruntang@163.com

A discussion and analysis of factors that contribute to nurses' job satisfaction and happiness index can be useful in developing effective interventions to improve nurses' enthusiasm, sense of honor and pride and to improve the efficiency and quality of medical services.

A total of 220 questionnaires were sent out, and 160 questionnaires were completed by nurses in three secondary hospitals (The People's Hospital, a Chinese medicine hospital, and a maternal and child health care hospital); 60 were completed by nurses in nine primary care hospitals (8 township health centers and 1 community health service center). A total of 206 valid questionnaires were completed, and the questionnaire return rate was 93.6%. The subject's inclusion criteria were as follows: currently working, had obtained a medical practice certificate, and had no mental illness or disturbance of consciousness when the study was conducted. The exclusion criteria were as follows: re-employment after retirement, retired nurses and nurses who were engaged in advanced studies.

In this study, 206 registered nurses at the 2011 annual encounter for 12 Hanchuan hospitals completed a questionnaire survey that covered three aspects of the well-being index and thus served as a comprehensive well-being and job satisfaction tool.

To ensure the validity and consistency of the questionnaire survey, the trained researchers engaged in conversation and communication with the management staff of the participating hospitals and health service centers; they then explained to the respondents how to complete the questionnaire, providing identical instructions to each participant. Each respondent was given ten to thirty minutes to complete the form independently. Anonymity was maintained, and the forms were recycled.

The Institutional Review Board of Wuhan University School of Medicine, China, approved the study protocol. This study followed the Helsinki Convention’s norms and later modifications as well as the uniform requirements for manuscripts submitted to biomedical journals. This team ensured that the data collection process to fully respect and protect personal privacy. Fill out the instructions of the questionnaire also have instructions, respondents (nurses) to fill in the questionnaire, on behalf of their informed consent, and acknowledged our questionnaire information is not registered. Their written consent to participate in this topic research.

We employed double parallel data entry with EpiData (version 3.1, Lauritsen JM & Bruus M, Odense, Denmark) and consistency testing using the Statistical Package for the Social Sciences software (version 18.0, SPSS, Inc., Chicago, IL, USA) to conduct a descriptive analysis. Pearson’s correlation analysis and multiple linear stepwise regression analysis were also employed. All tests were two-sided, and statistical significance was set at p<0.05.
Based on their index score, the nurses’ overall happiness level was moderate. The dimensions of the happiness index are listed in descending order of their contribution to the nurses’ comprehensive happiness levels: health concerns, friendly relationships, self-worth, altruism, vitality, positive emotions, personality development, life satisfaction and negative emotions. Four variables (positive emotion, life satisfaction, negative emotions, and friendly relationships) jointly explained 47.80% of the total variance of the happiness index; positive emotions had the greatest impact on the happiness index. Conclusions: Appropriate nursing interventions can improve nurses’ happiness index scores, thereby increasing nurses’ motivation and promoting the development of their nursing practice.
The Prevalence Of Self-Reported Mental Illnesses And Treatment Seeking Behavior Among Males Aged 35 To 50 Years In A Medical Officer Of Health (Moh) Area In A District In Sri Lanka.

Silva J P
Silva, J P ; Suseendrant, P ; M A A P Alagiyawanna
Health Education Bureau, Ministry of Health.
Sri Lanka
pdamakasilva@gmail.com

Mental health has been a cause for concern in Sri Lanka for some time. The country has one of the highest suicide rates in the world, with an average of 6000 deaths per year; nearly 100,000 people would attempt suicide every year in Sri Lanka. In the absence of a national program to determine the prevalence of mental health issues, it has become impossible at least to know how many people are having them. It is also important to find out the prevalence of treatment seeking behavior in order to identify the treatment gap. A district in Western Province of Sri Lanka has been chosen for the study with diverse religious and ethnic groups, presence of urban, semi urban, rural and estate areas, job opportunities and thereby income generation etc.

To determine the prevalence of self-reported mental illnesses and describe treatment seeking behavior among men aged 35-50 years in a Medical Officer of Health area in a district in Western province of Sri Lanka.

A descriptive cross sectional community survey was carried out on 4614 households in a MOH area in a district in Western Province of Sri Lanka in order to determine the prevalence of self-reported mental illnesses which have been previously diagnosed by a qualified medical person and to describe the treatment seeking behavior of those with such mental illnesses using an interviewer administered questionnaire. Households were selected on the basis of having an economically active male who is between 35 -50 years. Those households without such a person were excluded from the survey. Almost all households where a male person aged 35-50 years is permanently residing in a MOH area were covered during data collection carried out during a period of 3 months.

Majority of families interviewed belonged to the ethnic group of Sinhalese 4214 (91.3%) and Buddhist religion 4074 (88.3%). There were 394 (8.5%) Tamil families and 382 (8.3%) Hindu families. About 62% of families enrolled have a monthly income between SLRs 10,000 to 25,000.

Among 4614 males surveyed, 5.3% of have been identified to be having self-reported mental illnesses. Of 246 patients who were reported to be having mental illnesses, 133 (54%) admitted to be taking treatment mostly from government health institutions. Therefore many patients with mental illnesses seem to be not complying with treatment.

A large majority of patients have been taking treatment from government hospitals whereas only 4.5% of patients have gone to other places for treatments. Traditional healers have been consulted by 3% of those with self-reported mental illnesses.
Following the survey it was reported that of 105 patients who declared the reasons for seeking treatment, majority of patients with mental illnesses have presented with loss of appetite / lethargy (13.2 %). Other symptoms include, inability to control anger (10.6%), anxiety (9%), deliberate self-harm and loss of memory (7.9% each).

A generalized sample was obtained by visiting households where there is a male between 35-50 years. This study showed that the prevalence of self-reported mental illnesses among men aged 35 - 50 years to be 5.3%. When questioned about mental illnesses it was necessary to allay the fear of interviewees. Although they were reassured of the fact that their mental illnesses would not be divulged to others, there may have been a few who did not come up with their illnesses even after thorough questioning due to stigma. In addition to that it can be argued that there are a few cases which have not been so far detected by trained medical personnel. Therefore the actual figure should be somewhat higher than 5.3%.

Most of the time those with mental illnesses failed to produce a diagnosis card. Their mental illnesses are self-reported ones and may not be 100% accurate.

As regards treatment seeking behavior it was revealed that only 54% of patients are complying with treatment. Therefore it can be concluded that although some patients have been diagnosed to have mental illnesses many of them do not comply with treatment.

After the survey it came to be known that there are many economically active men with mental illnesses who do not comply with treatments. Therefore a countrywide network of field officers be recruited especially in rural and estate areas where there are no adequate health care facilities to ensure timely delivery of drugs with the view to cure or control the illness.

It is also recommended that a field survey be carried out with medical personnel capable of diagnosing mental illnesses at the field level with a view to diagnose new cases of mental illnesses.
The Quality Of Life (Qol) Indicator Related To Demography Factor Of Indonesia’s Workers In Small And Medium Enterprise Factory

Indri Hapsari Susilowati
Indri Hapsari Susilowati, Lassie Fitria, Anita herial
Occupational Health and Safety Department, Faculty of Public Health, Universitas Indonesia
Indonesia
indri.susilowati@gmail.com

Indonesia as a member of ASEAN country have to prepare for ASEAN Economic Community (AEC) that was established to deal with free trade between country. Investment in Occupational Health and Safety (OHS) will enhance the national and regional productivity. Unfortunately, assessment in OHS related to quality of life of workers in small and medium enterprise factory is limited, whereas this study will be evidence that OHS is important factor in productivity and quality.

Study was conducted to assess quality of life of workers by identify risk factor related to health profile of workers in small and medium enterprise factory.

Method of this study was cross sectional with random sample that was taken in garment and food industries in Jakarta, Bogor, Depok, Tangerang, and Bekasi City. Data collected by questioner, interview, and observation. Total sample was 535 workers. The tools that used were demographic form and Brief WHO quality of Life form to identify physical, health, psychological, social, and environment domain.

This study showed that psychological domain of QoL have correlation with Gender (p=0.039), it mean gender have no satisfaction and cannot enjoy with their, then it influenced to their psychological factors. Besides that, environment domain of QoL also have correlation with education with (p=0.003). The condition of living place; the transportation, the information, and access to social service have influenced to the level of education.
The Relationship Between Air Quality And Dengue Cases: A Systematic Review

Rafdzah Zaki
Rafdzah Zaki; Nasrin Aghamohammadi; Kavita Ragupathy; Abqariyah Yahya
Julius Centre of University Malaya (JCUM), Department of Social & Preventive Medicine, Faculty of Medicine, University of Malaya.
Malaysia
rafdzah@ummc.edu.my

Dengue fever is a viral infectious disease transmitted by mosquito. Dengue fever remains a major public health challenge in Malaysia, and has emerged as an international public health concern. The effect of climatic factors such as temperature, humidity and rainfall on dengue transmission has been investigated thoroughly in various studies. The influence of weather and climate variability on dengue fever is through direct impacts of dengue on the biological or life cycles of Aedes mosquitoes and the length of extrinsic incubation period of dengue virus in mosquitoes. There is postulation on the effect of haze on the activity and mortality of mosquito. However the relationship between air quality and dengue cases has not been established.

The focus of this systematic review is to identify previous studies and gather evidence to investigate the relationship between the air quality and dengue cases.

Seven databases (Pubmed, Science direct, Scopus, EBSCOhost, Cochrane library, JSTOR and Ovid) were used to collect relevant publications using the keywords ‘API’, ‘Haze’, ‘Air pollution’, ‘Air Quality Index’, ’Dengue’ and ‘Aedes’. Bibliographies of selected papers were searched for further related papers.

A total of 2639 articles were identified initially. However after reviewing the title and abstract, only four articles were related to this topic. After reading full text of articles, only three articles involve analysis of dengue data. Two studies concluded the possibility of a negative correlation between the air quality and dengue cases. One study did not find any significant relationship between air quality and dengue. Whereas another article just commenting on the issue of relationship between dengue cases and haze in Singapore. In conclusion, currently not enough evidence available to support the relationship between air quality and dengue. There is lack of primary study looking at the association and more research is needed to establish this.
The Relationship Consumption Of Fermentated Black Glutinous Rice With Prevention Of Incidence Metabolic Syndrome At The Age Of 40 Years And Over In West Bandung Regency, West Java Province

Rr. Nur Fauziyah
Rr. Nur Fauziyah
Doctoral Program in Faculty of Public Health Universitas Indonesia
Indonesia
roronur70@yahoo.com

Incidence of metabolic syndrome by the Adult Treatment Panel III (ATP III) of the National cholestrol Education Program at the age of 40 years and above 24% and WHO 21%. The prevalence of metabolic syndrome in the US reaching 25%, 31% Padang City, Jakarta and surrounding 21.6%. Fermentated black glutinous rice has a component phenolic, flavonoid, anthocyanin and fiber that allegedly prevent metabolic syndrome by regulating gene expression adipositokin that affect the prevention of obesity and diabetes.

The purpose of this study was to determine the relationship of fermentated black glutinous rice consumption with prevention of metabolic syndrome at the age of 40 years and over in West Bandung regency, West Java Province

This study used case control design. Samples in this study were respondents aged 40 years and over in West Bandung regency, West Java province with 57 cases and 57 controls. Collecting data through interviews and physical examinations. Analysis of the data in this study was a multiple logistic regression.

The cut-off point the amount of consumption of fermentated black glutinous rice at least a day can prevent the incidence of metabolic syndrome is > 11.5 grams per day. The proportion of metabolic syndrome is more than respondents who consume fermentated black glutinous rice 11.5 grams per day (82.1%). The proportion of non-metabolic syndrome was greater in respondents who consumed fermentated black glutinous rice > 11.5 grams per day (77.2%). There a significant association of fermentated black glutinous rice consumption with prevention of occurrence of the metabolic syndrome at the age of 40 years and over after the controlled intake of fiber as a confounding factor, with p <0.001.
The Research On The Risk Factors Of Life Expectancy In Hubei Province

Fangfang Cui
Fangfang Cui; Lan Zhang ; Chuanhua Yu
Wuhan University
China
2009302170013@whu.edu.cn

Many noncommunicable chronic diseases are caused by risk factors, which affect the improvement of life quality. Quantification of the disease burden caused by different risks informs the major risks for life expectancy of Hubei province.

To provide a scientific basis for developing interventions and improving the population life expectancy by evaluating the disease burden of risk factors.

It can obtain the main risk factors for population exposure rate from the monitoring of chronic disease and its risk factors 2010 in Hubei Province, and the relative risks per unit of exposure from literature of systematic review and meta analysis. Then we used the counterfactual attribution method to calculate the population attributable fraction (PAF). Combined with PAF, we estimated deaths, years of life lost (YLLs), years lived with disability (YLDs) and disability-adjusted life years (DALYs) attributable to the independent effects of different risk factors in 2010 in Hubei province.

Through calculating the disease burden attributable different risk factors, we get the three top causes of risk factors for life expectancy: dyslipidemia (YLLs 970773, YLDs 58858, DALYs 102963), smoking (YLLs 841936, YLDs 97899, DALYs 93983), hypertension (YLLs 376820, YLDs 51319, DALYs 42813).

Non-communicable diseases has been one of the factors that have great influences on life expectancy of Hubei residents, as a result of which tree-grade prevention strategy should be focused. Health education, behaviors intervention, enhancement of life quality and living environment, elevation for health concept and prevention of risk factors should be reinforced according to local situations.
Breastfeeding provides many benefits for the infants, especially for their survival. Unfortunately there are a lot of mothers did not continue breastfeeding their child up to two years. In sub-district Kebayoran Lama of South Jakarta the coverage of exclusive breastfeeding (2011) was 59.2%, which was higher than that of South Jakarta district (45.9%) and Jakarta province (34%) respectively. According to Basic Health Research (2010), in Jakarta Province the coverage of breastfeeding up to two years was 70.3%, while at the national level was 80.1%.

In order to assess the role of mother’s knowledge on breastfeeding toward their continuity to breastfeed up to two years,

A cross sectional design was used and 140 mothers with children of 25-36 months was selected randomly. Data were collected through interview using pretested questionnaire for its validity and reliability. Data were analyzed using multiple logistic regressions technique.

This study found that, 53.6% of mothers breastfed their babies up two years, and 55.7% of mothers had good knowledge on breastfeeding. Furthermore, data analysis indicated that the mother’s knowledge on breastfeeding influenced their continuity for practicing of breastfeeding up to two years, whereas mothers who had good knowledge on breastfeeding likely to continue breastfeeding up to two years three times higher than that of mothers who had less knowledge after controlling both parity and mother’s breastfeeding plan (p= 0.001; OR= 3.12, 95% CI= 1.12-3.85).
The Utilization Of Expanded Polystyrene Waste As Ecofriendly Material: An Evaluation Of Acoustic Characteristics

*Sjahrul Meizar Nasri*

*Sjahrul Meizar Nasri; Iting Shofwati*

Universitas Indonesia

Indonesia

sjahrul.mn@gmail.com

Noise pollution and the accumulation of generated Expanded Polystyrene (EPS) waste were a public health problems in our society. In this study we describe an environmentally friendly material to be an alternative sound absorbing materials due to its acoustic performance. - called BATAFOAM – obtained from recycled EPS from packaging. The use of recycled EPS in the form of batafoam expected to be alternative solution existing problems of both noise pollution and non biodegradable waste.

The aim of this paper was investigate the batafoam’s sound absorption coefficient (α) to evaluate the potentiality recycled EPS as a sound absorbing material

The batafoam was acquired from recycled EPS, fine aggregate, cement, and water. Various mixture of cement and fine aggregate (1:4,1:6,1:8) were produced by replacing fine aggregate with EPS as much as 0%, 20%, 40%, 60%, and 80% of volume. Fifteen prototypes of batafoam were produced triplicate. The sound absorption coefficient (α) were measured by the two-microphone impedance tube methods (Brue & Kjaer 4206). The measurement was performed up to 6400 Hz with two ¼ in. microphone in accordance with ASTM E1050 and ISO 10543-2:2002. The samples were cylinder, ± 29 mm2.

The result showed that the main absorption have value approximately 0.5 – 0.6 around 600 – 1200 Hz. The Batafoam had a characteristic peak absorption of 0.65 – 0.94, around 700-800 Hz. It absorbs up to 60% of the sound in the frequency band of the 500 Hz. The acoustic characteristics of batafoam indicated that α were in range of 0.15 to 0.29 and were classified as class E of absorbing material. Thus, it was concluded that the batafoam’s α were better than the concrete or masonry wall and may be implemented to be an alternative noise control due to its acoustic performance.
The Young Doctors Program: Raising Awareness Of Schoolchildren On Health In Rural District In Malaysia

Lee Jing Kun
Lee Jing Kun; Julia Liew Sien Yuin; Divyamalar D/O Mohan; And Ohms Kuala Langat Group
UNIVERSITY OF MALAYA
MALAYSIA
kun620909@hotmail.com

In Malaysia, the Young Doctors Programme (or known as program “Doktor Muda) is a school-based health promotion programme introduced to primary school students by the government.

The objective of this study was to explore the school childrens perception of the Young Doctors programme and its effects on their health behaviour. Qualitative interviews were conducted among school children and their teachers in two primary schools that implemented the Young Doctors Programme. Purposeful sampling was performed to select 29 students. A semi-structured interview guide was used. Thematic analysis was performed to identify themes emerged from the interviews.

Overall, there was improvement in knowledge and awareness among the school childrens on healthy behaviour such as diet, physical exercise and hygiene, and the danger of smoking and having high body mass index. The majority were able to adopt healthier practices and attitudes. Due to the difference in setting, culture and population of both schools, the selection criterias to select children into the programme varied and there were discrepancies in health related knowledge between members of two schools. All participating children gained confident and able to give advice to their friends and family on healthy lifestyle. The programme appeared to have spillover effects where aborigine children were able to influence their family members to maintain the cleanliness of their surrounding neighbourhood besides improving the school environment.
Tooth Extraction As A Risk Factor For HCV Infection In Iraq: Studying Abs, RNA And Genotype

Waqar Al-Kubaisy

Waqar Al-Kubaisy; Redhwan A. Al-Naggar; Nik Shamsidah NI; Yuri V. Bobryshev; and Mustafa Waseem Al-Kubaisy

Universiti Teknologi MARA (UiTM) Faculty of Medicine
Malaysia
waqar_abd@yahoo.co.uk

Hepatitis C virus (HCV) is recognized as an important global disease, with more than 170 million people are chronically infected. Hepatitis C is generally asymptomatic with up to 80% of infected cases which will progress to persistent infection. Despite its higher prevalence and transmissibility, HCV, has received far less global attention than HIV. At the WHO's 63rd World Health Assembly in May 2010, a resolution was passed to establish goals and strategies for disease control, increasing education and promoting screening and treatment of people infected with HCV.

Transmission of HCV has been mainly related to intravenous drug use since blood products transmission has decreased in most developed countries. The medical risk factor associated with HCV infection such as blood transfusion and surgery had been intensely studied in many countries. Up to 40% of patients infected with HCV may have non identifiable routes of viral acquisition. Tooth extraction may be one of these risk factors. The presence of HCV particles in oral fluids has been demonstrated by many authors and this may indicate that transmission via saliva and gingival cervical fluid might occur. Dentists and dental health care workers are at a high risk of infection with HCV during their daily occupational exposures. Similarly, they can infect their patients by such agents if adequate infection control is not implemented. Hence, viral hepatitis infection in dentistry is an important issue. To date there is no definitive conclusion on the role of dental procedures in HCV transmission.

To determine if tooth extraction acts as risk factor for HCV infection and to identify the infectivity and most predominant HCV genotypes among subjects with dental extraction.

A case-control study was conducted among pregnant women in Baghdad. The study population consists of 776 pregnant women with history of tooth extraction and 2715 with no such history. All cases having tooth extraction of at least 6 month prior to the study were interviewed focusing on history and place of tooth extraction. Serum sample obtained from each participant was dispensed in two screw capped frozen tubes, stored at “20o C and-70o C for antibody testing and molecular analysis respectively.

Initial screening of HCV antibody was carried out using third generation enzyme immunoassay (EIA-3). The positive results were confirmed by using the third generation immunoblot assay (Lia Tek-111). This test yield to 3 results interpretation (Positive, Indeterminate or Negative). Only Lia-Tek III reactive serum sample was considered as positive HCV antibodies serum. On the other hand, a total of 94 (stored at “70o C) comprising of 64 positive, 20 indeterminate & 10 negative Lia Tek-111 serum samples were transferred to laboratories of Sorin Diagnostica (Sallugia, Italy) for molecular analysis
using the RT-PCR and DNA enzyme immunoassay (DEIA) method. Detection of RNA and genotypes of HCV was done using DEIA method. Classification was done using the Simmonds Nomenclature for HCV genotypic classification as proposed by international HCV collaboration group 1994. All the laboratory procedures were done according to the manufacturers instructions. Descriptive and statistical analysis using SPSS 20 was done. Univariate analysis, odds ratios (ORs) and 95% CIs were calculated, considering p<0.05 as significant.

HCV seropositive rate was significantly higher (6.2%) among women with history of tooth extraction compared to (2.36%) the control group (p=<0.00101). Tooth extraction proved to be a significant risk factor for acquiring HCV infection (OR=2.7, 95% C. l: 1.888-3.95). These findings were similar to other studies conducted in Pakistan, Turkey, Morocco, and Italy had reported that dental procedure was one of the major risk factor for HCV transmission. In contrast to our finding, several studies in Australia, Romania, Nigeria, and France found that tooth extraction was not associated with anti-HCV positivity. Our study showed that women attending government dental clinics had higher (7.5%) anti-HCV seropositive rate compared to (4.3%) of those attending private clinics, however, the difference was not statistically significant (p=0.06).Tooth extraction at the government clinics demonstrated a higher risk of exposure (OR 3.337795% C.I 2.25-5.066) compared to that of private clinics (OR 1.865 95% C.I. 1.043 -3.34). The variations could be attributed to the difference in the socioeconomic status of the attendees at the two types of clinics. In addition, overcrowding in government clinics and fast turnover of patients as well as non adherence to guidelines on infection control, use of non disposable or reusable syringes, and lack of sufficient sterilization techniques, may contribute for the higher prevalence rate of HCV infection. Due to these reasons, studies done in the US, Western Europe and Australia generally have not reported any association between dental procedures and HCV infection as there was a good infection control mechanism.

Out of 94 serum samples, 59(62.8%) demonstrated HCV-RNA positive. HCV-RNA among women with history of tooth extraction was (74.6%) significantly higher compared with (38.7%) those having no such a history, I2=9.97; P=0.0016. Tooth extraction acts as a risk factor for HCV infection, OR 4.65 95%; C.I=1.08"2.69. Therefore, women with tooth extraction in our study were not only infected but they were also actively infective and could be a source of HCV infection The findings are interesting particularly, when Hasegawa et al.(2003) found both anti-HCV and HCV-RNA in haemostatic gauzes from infected patients referred to dental clinics, even after24hours being kept at room temperature.

Determining the genotype of HCV is an important tool for diagnosis, treatment response, and epidemiological analysis. Of 59 positive HCV-RNA, 57 were genotyped and two could not. Five genotypes/subtypes were presented as a single (4, 1b, 1a, 1) or mixed pattern (3a&4). The predominant genotype was HCV-4 (29/57), followed by, 1b (20/57). HCV-3a was the lowest. These findings were in accordance with that of Alfaleh and Ramia (1997) who demonstrated the same pattern of predominated genotype 4 followed by 1b and 1a among Saudi patients. Although HCV-4 is predominant among Iraqi population, we detected that the highest HCV genotype prevalent among women with dental extraction was HCV-1b (90%) followed by HCV-4 (82.7%) and genotype HCV-3a (66.6%) was the lowest. This is similar to studies done in Turkey Japan and South Korea with genotype 1 or 1b seen in a significantly high ratio among those with history of tooth extraction.
Trans Fat Intake And Its Relation To Lipoprotein Level In A Sample Of Adults In West Java, Indonesia

Ratu Ayu Dewi Sartika
Ratu Ayu Dewi Sartika
Faculty of Public Health, University Indonesia
Indonesia
ratuayu.fkm.ui@gmail.com

In Indonesia, cardiovascular disease (CVD) as a public health problem had become the single major cause of death. One cause of high death rates is lifestyle, especially diet. Diets high in fat, saturated fat, and trans fat may increase lipoprotein (a)

The purpose of this study was to determine the mean intake of trans fat and its relation to lipoprotein (a) level in adults

A cross sectional study was conducted on a total of 156 adults man and women aged 30-55 years and live in urban and rural areas.

The results showed that mean intake of trans fat was 0.37% calories (rural 0.36% and urban 0.38% calories). The main source of trans fat was fried foods, ruminant product and margarine/hydrogenated vegetable oil products. The proportion of Lp (a) 'not normal' was 29% (rural 28.6% and urban 30.0%). There was no significant association between Lp (a) level in rural and urban areas. There was a statistically significant association between trans fat intake and Lp (a) (p<0.05). Further studies are recommended to determine relationship between trans fat intake and other lipoproteins.
Transforming Evidence To Motivation: Using Community Based-Participatory Research To Improve Mass Drug Administration For The Elimination Of Lymphatic Filariasis In Indonesia

Rita Damayanti
Rita Damayanti; Alison Krentel; Timothy Lynam; Christiana Titaley; Nugroho Suharno
Faculty of Public Health
Indonesia
damayanti.rita257@gmail.com

Since 2002, Indonesia has declared to participate in the Global Lymphatic Filariasis (FL) Elimination program, since Indonesia is one of the six countries in South East Asian region with LF endemic. Based on Survey Darah Jari (SDJ) the prevalence of microfilaria is around 1%-38.57% making almost half of Indonesian people in 337 districts is at risk of having FL. Although the coverage of Mass Drugs Administration (MDA) was high, most districts did not pass it due to low of compliance in taking the drugs. To improve MDA FL program a Community Based-Participatory Research was conducted in Agam which represent rural sites and Depok represented urban sites.

Aim of this action research is to show how evidence from the survey can motivate the local district to improve their MDA LF strategy if they were involved in the study design.

The two survey sites, Depok city and Agam districts were chosen based on the recommendations of the SubDit Filariasis. Agam failed the Transmission Assessment Survey (TAS) in 2013 and must complete another two years of MDA before another assessment can be done. Depok city was not qualified for TAS since the coverage rate was less than <65% over the last five years. Depok had to carry out an additional three years of MDA. Both sites need to improve coverage and compliance with MDA LF. Engagement is important element Community-Based Participatory Research (CBPR) to build ownership of the data. There were four phase of engagement with the local government as partners: engagement of local stakeholders, development of instrument, data collection, and data analysis. To show the effectiveness of CBPR, compliance survey was conducted twice, before and after MDA LF. The sample size was calculated with 95% confidence level and absolute precision of 5%. Using Proportionate Probability Sample 58 clusters has been chosen and for each cluster 7 household were randomly chosen. In total 805 household (401 in Agam; 404 in Depok) have been interviewed.

Baseline survey showed that in both sites coverage and compliance were not reached the target. No defensive responses were shown from both districts, they learn that the problem caused by the expansion of eligibility definition in the field such restriction to the healthy elderly, breast feed mother, people drinking any medicine, etc. Participation of young people was low, since the MDA is based on household. In big city such as Depok, many people were not at home when MDA LF conducted. Compliance was low due to lack of information.

Based on the result, both sites revised their strategy such as broaden the scope of eligibility people and improve health promotion activities. On the result workshop, it was discussed that strategy in big city such as Depok should be different than Agam. Agam expanded the program to schools, and
Depok integrated the program to other program due to limitation of funding and involving other sectors such as private hospital and military based hospital. With minimum assistance both sites revised their strategy of MDA LF. Strengthening health promotion strategy was shown by increasing awareness from 70.6% to 85.8% in Agam and from 67.4% to 85.5% in Depok. Lack of information as one of the most reason of not taking the drugs decreased from 18.5% to 14.8% in Agam and from 20% in Depok to 8.6%. Impact of the improvement of MDA LF activities shown in the significant difference of the coverage and compliance rate in both sites. In Agam coverage of the last MDA significantly increased from 68.7% to 90.8% with compliance rate from 66.6% to 84.1%. Whereas in Depok the coverage increased significantly from 69.8% to 73.8% with compliance rate 48.2% to 67.3%.

This study shown that CBPR effective enough to transform data into motivation for the district health service to strengthen MDA FL program without rejection. Feeling supported by the study can be created by involving the stakeholder from each steps of the study.
Indonesia is currently facing challenges sustainability of its HIV programs due to the decrease of external funding. External donor financing has played significant role in supporting approximately 60% of HIVAIDS program activities. Indonesia has implemented universal health coverage known as Jaminan Kesehatan Nasional (JKN) under single payer scheme (namely BPJS) started in January 2014. The benefit package provided is comprehensive, however some health care services are not covered. HIVAIDS program activities have been supported by the government and donors, only treatment of opportunistic infection has already covered under UHC scheme. Under new scheme it is expected that number of PLHIV covered by JKN increase.

we assessed whether access for HIV/AIDS patients new financing scheme has increased, particularly for opportunistic infection treatment. HIVAIDS program intervention is an example of a unique mixture of public health and curative programs. This analysis will help policy makers to summarize and decide inclusion of HIVAIDS program into the universal health coverage, started from the existing coverage.

This study used retrospective data before single payer scheme or Jamkesmas claim data (year 2011-2012) and recent JKN claims data (2014). Data for inpatient care was analyzed to determine the claim of opportunistic infection among PLHIV for various cases, and to prove increased access after implementation of the single payer (BPJS) scheme. The claim data was covering all region in the country, representing cases with different level of severity. Data cleaning has been done to ensure data quality. Trend analysis was undertaken to compare claims before and after implementation of the new scheme. Discussion on the policy implication based on the findings was also addressed.

Prior to the single payer scheme, only the poor was covered under Jamkesmas program. It has increased significantly after implementation of UHC. It seems that the UHC scheme helps access for HIVAIDS patients, number of cases treated increased more than doubled. In 2011 and 2012, Jamkesmas claim was reaching 2050 and 1971 claim respectively. The total claim reached IDR 7 billion in 2012 and increased to IDR 72 billion in 2014. Claims for opportunistic infection cases on average was IDR 3.7 million. The analysis result also revealed that number of PLHIV who were voluntarily enrolled (not supported by any employer) or informal worker scheme increased. In conclusion, the access to health care under new scheme has significantly increased as compared to the previous period. However, ensuring continuum of care of HIVAIDS program intervention is important, and not fragmented. Current achievement of program performance has been supported by outreach program done by various non-government organization and involvement of key affected population (KAP). This should be maintained and continued. Although burden of current HIVAIDS claims was small as compared to total BPJS claim (less than 1%), without a systematic approach to
prevent HIV cases the government will be facing potential increase of burden in the future. It is recommended to assess potential inclusion of a more comprehensive HIV/AIDS care and services into the JKN scheme, other than the current scheme that only covered opportunistic infection. Aside from JKN scheme, part of the program that related to public health and outreach programs should remain as government responsibility. Support to enhance prevention program is critical, it will reduce new infection and finally could reduce financial burden of HIV/AIDS
Family planning has become a major strategy of population control at the national and global level. Yet, male participation remains low especially in rural areas due partly to lack of adequate knowledge and poor perception about the need to utilize male contraceptive methods. Family planning was also perceived as a woman's things which make men feel uncomfortable with it. This study aimed to examine factors related to male contraceptive utilization in Indonesia rural area.

We used data from Indonesia Demographic and Health Survey (IDHS) 2007 and 2012. Information of 10,137 rural married men was examined to determine the relation between socio-economic factors (education, literacy, wealth, and occupation), knowledge, perception of male contraceptive and media exposure with male contraceptive utilization.

Male contraceptive utilization from 2007 to 2012 showed a decline (3.3% to 3%) but there were positive changes in condom used (0.7% to 1%) and withdrawal method (1.1% to 1.2%).

Awareness of family planning also increased through increasing knowledge of modern contraceptive method from 89.6% to 94.7%. Male knowledge also perception about condom were remains good and stable (over 96%). Perception that condom diminishes the pleasure decreased from 1.4% to 0.16%.

On the contrary knowledge and perception about male sterilization were still poor and were not much change. Majority of man still assume that sterilization was not an effective method for family planning, the operation is unsafe, sterilization is not simple operation and expensive. However there were a little increasing proportion intention of male who would consider to do sterilization after having all the children wanted (1.6% to 2.4%).

It also find perception of contraceptive still a woman’s business increased (31.8% to 44.6%). This revealed that social construction of patriarchy is the primary barrier to the uptake of male contraceptive. Sosio economic factors (education, occupation) and radio as media exposure related to male contraceptive utilization.

Male participation in contraceptives were not increased and it were influenced by wide array of factors. Thus this study recommended there must be wide speed information, education and communication spesific about male contraceptive in rural areas. Strengthen the role and commitment of male family planning motivator and peer group in order to achieved desired behavioral change towards family planning that man also responsible for family planning.
Urban-Rural Differences In Cardiovascular Disease Risk Factors: A Cross-Sectional Study Of Schoolchildren In Wuhan China

Junfeng Yu
Junfeng Yu
Wuhan University
P.R.China
4657473@qq.com

China’s rapid population growth and urban migration has developed healthcare inequity across the urban-rural divide. Past studies comparing CVD risk factor prevalence amongst urban-rural Chinese children are sparse and conflicting.

To examine the association between urban-rural residence and risk of offspring cardiovascular disease (CVD) in Chinese children.

The cross-sectional study was conducted in Wuhan, China, during May and June 2010. CVD risk factors include; waist circumference (WC), systolic blood pressure (SBP), diastolic blood pressure (DBP), fasting glucose (FGB), triglycerides (TG), high-density lipoprotein (HDL) cholesterol, low-density lipoprotein (LDL) cholesterol, BMI, cardiorespiratory fitness (CRF), metabolic syndrome (MetS), and metabolic risk score (MRS). Analysis of covariance and multivariable logistic regression were used to estimate associations between urban-rural residence and offspring CVD risks.

Rural boys had significantly lower mean CRF and elevated mean FGB, TG, and MRS, while urban boys had significantly elevated mean LDL and DBP. Rural girls had significantly elevated mean BMI, FGB, and TG, as well as lower CRF. Rural children were at increased odds for decreased CRF, elevated MRS, and TG, (OR:2.04, 95%CI:1.29-3.25), (OR:2.33, 95%CI:1.50-3.62), and (OR:2.40, 95%CI:1.62-3.57), respectively. Rural girls and mothers were at greater odds for having overweight/obese weight status, (OR:7.19, 95%CI:1.64-31.6) and (OR:1.683, 95%CI:1.01-2.82). However, rural boys and fathers were less likely to have overweight/obese weight status, (OR:0.62, 95%CI:0.34-1.12) and (OR:0.68, 95%CI:0.48-0.97). In conclusion, Rural residence was significantly associated with increased CVD risk factors amongst Chinese children.
Urinary Chromium And Malondialdehyde (MDA) Content In Blood Among Tannery Workers In Sukaregang, Garut West Java, 2015

Randy Novirsa
Randy Novirsa; Bambang Wispriyono; Budi Hartono
Department of Environmental Health, Faculty of Public Health, Universitas Indonesia
Indonesia
randy.novirsa@gmail.com

Chromium (Cr) has been widely used in many industrial application. Chromium application in tannery industry has potential adverse effects to the workers
The aim of this research was to determine the effect of chromium exposure to one of oxidative stress status in the body by measuring malondialdehyde (MDA) content in blood
A total of 25 workers were included. Blood and urine were collected to measure MDA content and total chromium. MDA was determined using spectrophotometric assay TBAR reaction method and total Cr was determined using graphic furnace atomic absorbtion spectrometry (AAS).

The result showed revealed that urinary total Cr in workers was 19.65 µg/L (n=25). Twenty five (25%) of workers urinary Cr was above biological exposure indices (BEI) ACGIH (≥ 25 µg/L). However, Malondialdehyde (MDA) was not significantly different among high exposed workers (Cr > BEI) and low exposed workers (Cr < BEI) (p = 0.716), (0.118 nmol/ml) and (0.124 nmol/ml) respectively. It had been concluded that workers had high urinary chromium from high chromium exposure in occupational ambient air in tannery industry and chronic exposure of chromium could be potentially increases risk of oxidative stress status and adverse health effects.
Usage Of Pesticides, Self Protection Methods And Influence Of Knowledge Of Farmers On Usage Of Pesticides In Jaffna District, Northern Sri Lanka

R. Surenthirakumaran
S. SIVAKANESAN; S. ANGAJAN; R. Surenthirakumaran; S.VASANTHARUBA
Faculty of Medicine, University of Jaffna
Sri Lanka
surenthirakumaran@gmail.com

Pesticides usage is a double-edged sword in the battle against pests as it affects human health and also contaminates the environment. Misuse, low pre-harvesting interval and overuse of pesticide is very common among farmers of developing economies and Sri Lanka is no exception. Similar to many developing countries, pesticide related issues in Sri Lanka have become a major concern in the recent past.

To assess the pesticide usage pattern, influence of knowledge on pesticide usage and self-protection methods in Valikamam East D.S Division. A cross sectional community based descriptive study was conducted in 385 farmers. Interviewer-administered questionnaire based study. Pesticide recommendation-2009 was used to access the usage of pesticides. Simple random sampling method used to identify a sample that represents the farmers who did the vegetable cultivation in Yala 2014. All questionnaires were coded systematically. Sixteen questions were asked regarding common pests, types of pesticides, how to use the pesticides, environmental hazards of pesticides and health hazards of pesticides, Which was resulted in response of either, choose the correct answer (had got 5 marks) or wrong answer (had got 0 marks) for each question. For open ended questions 2 marks given for each correct answers. Total score was counted and grouped into five categories. More than 80 marks was graded as excellent, marks between 80-61 was graded as good, marks between 60-41 was graded as moderate, marks between 40-21 was graded as poor and less than 20 was graded as very poor.

Data analysis was done by using SPSS 21. The various statistical analysis tools such as frequencies and percentages. Chi-square test was used to examine significant statistical differences in self-medication with factors affecting it. Significance of the relationship is determined when P value is less than 0.05 were used in our analysis. The knowledge status of the vegetable cultivating farmers towards pest management indicated that almost all the farmers were dependent on inorganic pesticides for the management of pest. There is no evidence of organic farming. About 45.5% of the vegetable-cultivating farmers were having a moderate level of agricultural knowledge and only 0.5% of the farmers were having a very poor knowledge. 79.2% of farmers knew that pesticides are hazardous things for human and 89.1% of farmer knew that pre-harvesting interval is important for harvesting. Unfortunately, most of the farmers had over usage of pesticide (61.6%) and low pre-harvesting interval (63.1%). Yard-long-bean had high level of pesticide over usage (88.9%). Only 30.9% farmers used masks during spraying pesticide. Findings of self-protection methods were not good. There was statistically significant between pre-harvesting interval and knowledge. Pesticide over usage and low pre-harvesting interval were most common among farmers of Valikamam East D.S. division. And also findings of self-protection methods were not satisfactory. But, they had good knowledge and good agricultural experience. These unfortunate findings may due to their careless and weakness of health services.
Utilization Of Dietary Supplements Among Elderly Malaysia : A Community Based Study

Basanta Kumar Mohanty
Basanta Kumar Mohanty; Osman Ali; Sandheep Sugathan; Chandrasekhar Giriyanpavanavar
University Kuala Lumpur Royal College of Medicine Perak (UniKL RCMP), Ipoh, Perak, Malaysia
Malaysia
basanta@unikl.edu.my

World population is aging. According to UN data the world's population aged 60 years or over increased from 8 percent in 1950 to 12 percent in 2013 and will increase to 21% in 2050. It is observed that the use of dietary supplements and prescription medications is higher in elderly population compared to general population. According to the Third National Health and Nutrition Examination Survey, 56% of middle age and older adults consumed at least one supplement on daily basis in comparison to 40% in general population. It is a matter of concern that some dietary products may have potential interactions with prescription medications producing adverse drug reactions and the older population are spending their money on some products that are unnecessary in most of the situations. These dietary supplements may be vitamins, minerals, herbal products or products of animal origin etc.

The present study was undertaken to determine the use of food supplements alone and/or along with prescription medications among elderly Malays aged 60 years and above in the community.

This population-based cross sectional study was conducted in selected urban areas in Ipoh and rural areas in Gopeng of Perak, Malaysia. The data were collected by door to door survey from 490 elderly Malays of both sexes aged 60 years and above who were willing to take part in the study by trained medical students of UniKL RCMP. The study population was divided into three groups i.e., 60-69 years, 70-79 years and 80 years and above for collection of data.

The sample size was calculated assuming that at least 50% of elderly Malay population will be using prescription medications and dietary supplements with an allowable error of 5%. Minimum sample size was calculated as 384, for 95% confidence level. Therefore the sample size of 490 was adequate enough for collection of data and analysis assuming a non-respondent rate of 25%.

The number of elderly people in the particular area according to last census data (2011) was obtained from the government authorities of the respective areas. The elderly subjects were interviewed by structured pre-validated questionnaires after getting their informed consent. The questionnaires administered and consent forms were both in English and Bahasa Melayu for better understanding by the subjects.

It was observed that 33.4% of the elderly population studied, used food supplements along with prescription medicines. Only 5% used food supplements alone. The prescription medicines alone were used by 81% of the study respondents. 15% of the study population, belonging to the age group of 60-69 years, used food supplements, where as 20% in the age group of 70-79 years and 6% in the age group of 80 years and above relied on food supplements. According to gender variability 11% male respondents and 14% female respondents consumed food supplements. According to
level of education, 7% of the elderly respondents had no educational background, 14% received primary, 13% secondary, and 56% had attended college/university.

10 most commonly used food supplements were milk, multivitamins, pamoga (commercially available pomegranate juice), sea cucumber, sea weeds, evening primrose oil, fish oil, herbalife, spirulina, and ginkgo biloba.

Some of the herbs used as food supplements among the study population were Misai cucing (Orthosiphon stamineus), puku kubuk (Nephrolepis acutifolia), stevia leaves, and bamboo leaf extract etc.

Most of the respondents reported that they got the information about food supplements from their friends and relatives.

The amount of scientific evidence supporting the safety and benefit of dietary supplements among the elderly varies according to the nature and form of the supplement. Certain supplements like vitamins and minerals should not be used above the prescribed limit. All dietary supplements are not safe and the inappropriate use of some can result in adverse health consequences. There may be inconsistencies in the product standard, contamination of preparations and mislabelling.

Use of dietary supplements is common among elderly Malay study population and it is necessary to educate them regarding the benefits, harmful effects and drug interactions of these supplements with prescription medications because the elderly patients usually do not disclose about the consumption of food supplements and other types of medications to their physicians.
Utilizing Telepsychiatry For Management Of Post-Disaster PTSD (Post Traumatic Stress Disorder) In Indonesia

Anthony Paulo Sunjaya
Anthony Paulo Sunjaya; Angela Felicia Sunjaya; Arlends Chris; Dewi Novianti
Universitas Tarumanagara
Indonesia
anthonysjy@yahoo.com

Post Traumatic Stress Disorder (PTSD) is a psychiatric disorder that is often found among victims of natural disasters which is currently not yet a priority and given a lack of attention in Indonesia. The use of technology in Indonesia such as teleconferencing has become commonplace, telecommunication equipments such as satellites, VSAT (Very Small Aperture Terminal) and others have also been growing rapidly in providing intra and inter-regional connectivity throughout the archipelago of Indonesia. These existing technologies can be utilized in telepsychiatry to handle and reduce PTSD in victims of natural disasters in Indonesia.

To evaluate the potential and possible strengths and disadvantages of Telepsychiatric used for handling PTSD patients post natural disaster in Indonesia.

Articles were obtained through Pubmed, Science Direct, Pro Quest, Taylor and Francis Online, Google Scholar, High Wire and Elsevier Clinical Key using the keywords post-traumatic stress disorder AND telemedicine OR telepsychiatry which were then reviewed.

Various studies have shown telemedicine has been an effective tool that can be used to perform early diagnosis and treatment of mental health disorders. Research has also shown that the quality of treatment provided through telemedicine as equally effective to that of face-to-face therapy. The widespread and effective management of PTSD through telepsychiatry therefore is expected to reduce the high rates of PTSD in disaster-prone areas.
Wastes Elimination: Impact Of Lean Practice In Kemang Medical Care (KMC)

A Heri Iswanto
A Heri Iswanto
Kemang Medical Care
Indonesia
hri.isw@gmail.com

Hospital usually generates a lot of kinds wastes. There are a variety of techniques and tools available to eliminate wastes. Lean is a problem solving approach for continuous eliminating wastes. Lean is about increasing value of customer by eliminating wasteful activities. This study pursues to find any activity or process that consumes resources without creating value is a target for elimination.

Data were collected using a questionnaire designed based on lean measure of hospital. Data were collected from January until June 2013, using clustered sampling. Data was analyzed using statistical methods t-Test and Chi-Square test were used to compare the mean value.

Average waste elimination was significant difference in overall waste elimination performance after 3 months and 6 months after implementation lean. Some variables: purchasing drug and supplies, level/ number of drug and supplies, total turn-around time (TAT), showed significant after 3 months implementation. Other variables: first time quality (FTQ) and full the equivalent (FTE) showed significant after 6 months. According to result the status of waste elimination using lean practices is satisfactory in KMC. Result also reflect of employee familiarity with the concepts and practices of lean in KMC overall. This study emphasized the immediately of lean is effective strategy to address the challenge of hospital waste elimination management.
Work Ability And Its Related Factors Among ASEAN SME Workers

Orawan Kaewboonchoo
Orawan Kaewboonchoo; Indri H Susilowati; Marzuki Isahak; Toai P Nguyen; Plernpit Suwan-ampai; Akkaradet Awatsadarak
Mahidol University Faculty of Public Health
Thailand
orawan.kae@mahidol.ac.th

Work ability is a concept which is developed by the Finnish Institute of Occupational Health researchers. The work ability level can predict the future permanent disability and duration of sick leave. Many previous studies have addressed determinants of work ability in working population such as health problems, lifestyle, work related factors and individual characteristics. However, the study on work ability is still limited in ASEAN countries. This study aimed to examine work ability and its related factors among SME workers in 4 ASEAN countries: Indonesia, Malaysia, Thailand, and Vietnam.

Cross-sectional study was used in this study. Data was collected by self-administered questionnaires included the Work Ability Index (WAI) developed by the Finnish Institute of Occupational Health, working environment, musculoskeletal disorder (MSD), lifestyle and socio-demographic questions. A total number of 2059 workers (812 male and 1247 female) from two industries, textile and food distribution, completed the questionnaires (at least 500 from each country).

The mean (SD) of WAI score for Indonesia, Malaysia, Thailand, and Vietnam are 39.68 (4.52), 38.69 (3.65), 39.02 (4.64) and, 41.50 (4.02), respectively. Multiple linear regression analyses were used to examine the association between studies factors and WAI among SME workers in these 4 countries. Six factors (alcohol consumption, perceived work environment, MSDs, marital status, shift work, and exercise) had significant (p < .05) correlations with WAI. In conclusion, alcohol consumption and perceived work environment were major determinants of WAI among SME workers. To promote the work ability of SME workers, improving lifestyle and work environment are essential aim of occupational health professional.
POSTER PROCEEDING
A Case Study On Nurses' Psychological Performance In High Care Units (Hcus) - The Study Of Improvement Of ICU Environment Design

Maki Murakawa
Maki Murakawa; Asuka Yamada
Architecture, Tokyo Denki University, Tokyo, Japan
Japan
mtr.inb@gmail.com

Many studies have been conducted on the influence of medical treatment ward environments on the well-being of chronic inpatients.

These studies have shown that the elements in environments where recovery occurs have a significant impact on the effectiveness of prescribed treatments. These elements may include the manner in which interiors are designed to reflect domestic elements, optimum light and noise levels, and family-friendly atmospheres. While similar findings have been obtained from studies conducted in intensive care units (ICUs) abroad in recent years, there is a lack of research about this topic in Japan.

In Japan, fully operational facilities with ICUs that manage high care unit (HCU) cases are not uncommon. Therefore, HCU specific surveys should also be conducted to determine if previous findings can be extended to describe the effectiveness of patient care under these conditions.

This study aims to verify the influence of ICU environment design on the psychological assessment of nurses. In addition, this study also identifies the ideal ICU environment for patients from the perspective of medical staff. A General Hospital in Tochigi Prefecture, Japan, was selected as a representative site where the proposed research was conducted.

To ascertain the relationship between physical activity and nurses stress levels, a pedometer was used to record the actions taken during the nurses work day.

Questionnaires were distributed to four nurses working during the regular (day) shifts and four nurses working irregular (night) shifts per day.

40 questionnaires were returned and were used to measure the relationship between the nurses stress levels and the work that typified an HCU environment.

Regular and irregular shift work loads were recorded for 3 days in the CCU, HCU and critical HCU. Surveys were also conducted in all wards in the same hospital to analysis the sequence result obtained.

This report includes an analysis of surveys conducted to gain insight into the psychological performance of nurses working in HCUs.

In the evaluated ward environments, 50% - 60% of the participants reported that optimum noise levels, scenery, and a family-friendly environment exert an important influence on inpatients conditions in the HCU.
58% of the participants reported optimum noise levels as the most important factor, while 52% of the participants cited optimum light.

In both of the wards, 58% of the respondents reported optimum noise levels as the most important influence on inpatients conditions. In these wards, respondents pointed out that much focus has already been placed on ensuring optimum noise levels. Furthermore, the respondents added that the most prominent sources of noise are limited to staff members voices and medical equipment alarms.

There were more CCU staff members who cited the influence of light conditions as more influential to the inpatients well-being than the HCU staff. This is because the CCU did not have a window at this hospital.

There was no significant difference based on the amount of physical activity performed by both teams, between the two wards and the wards of other clinical departments.

In both CCU and HCU wards, inpatients were recovering from serious illnesses. However, when compared with the wards of other clinical departments, there were no significant differences observed with respect to nurses psychological performances.

Further research will continue to analyze the collected data in greater detail to verify whether a correlation exists between the question to hear today's psychological performance and physical activity. In the future, this study will be extended to evaluate the impact of ICU environment designs from the perspective of patients and their families.

The aforementioned results are being used to develop a multistage network structure to incorporate the elements that are being assessed into recovery environments. This network comprises the principles of environment creation and specific aspects of ideal environments. This research contributes to the enhancement of future ICU environment design, since it provides research materials within each stage of the proposed network. Ideal environments can then be created with these materials to meet specific objectives.
A Cross-Sectional Study On Factors Related With Estimated Salt Intake Among Patients With Hypertension And Diabetes Mellitus In Chiangrai, The Northern Thailand

Motoyuki Yuasa
Motoyuki Yuasa, Supalert Nedsuwan, Saiyud Moolphate, Hirohide Yokokawa, Tsutomu Kitajima, Eiji Marui
Juntendo University
Japan
moyuasa@juntendo.ac.jp

Hypertension is one of major public health issues in developed as well as developing countries. Recently, the number of patients with uncontrolled hypertension reaches more than 1 billion worldwide. Findings of several studies indicated a significant association between salt intake and blood pressure, and have emphasized an importance of salt reduction for better management of blood pressures. Researches of intervention trials for salt intake reduction have suggest that a low sodium diet has a potential to reduce blood pressure measurements.

Average of sodium intake in South-east Asian countries such as Thailand is relatively higher than other regions. Thus, to reduce salt intake and control blood pressure, we conducted an intervention trial to examine an intensive health education that used visualization tools to make individuals more aware of their daily salt consumption in Muang district, Chiangrai province, Thailand.

The study aimed to elucidate which items were associated with daily salt intake using the base-line data of the trial. We conducted binary and multiple analyses using independent variables such as participants basic characteristics, awareness/perception against cardiovascular diseases (CVD), health/diet behaviors, family related items and available resources from outside.

The study participants were registered from patients who had visited diabetes or hypertension clinics at eight health centres and with General Framingham CVD risk score higher than 15%. The data collection of variables had been performed through a face-to-face interview using a structured questionnaire to the participants. We also asked individual awareness/perception on CVD using questions of key items based on health behavioural changing theory. Perceived susceptibility and severity of CVD from the health belief model were asked in a five-point Likert scale, and stages of change to reduce salt intake was assessed by six stages of transtheoretical model. The outcome, 24-hour salt intake, was estimated in overnight collected urine by a KME-03 salinity checker. We asked the participants to collect their overnight urine accurately for 3 days, and store the sample in the refrigerator until bringing to the researcher later.

In statistical analyses procedure, we divided all samples into two groups by the median of estimated daily salt intake, 9 (g/day). Those with less than 9 were referred to as a lower salt intake group, while those with over 9 were referred to as a higher salt intake group.

The study protocol was approved by the ethical committee in Thailand as well as in Japan. The trial was registered with International Standard Randomized Controlled Trial Number Resister. The study was financially supported by a Grant-in-Aid for Scientific Research of Japanese Ministry of Education,
Culture, Sports, Science and Technology. 793 samples were analyzed in the study. Mean age of total participants was 66.5 (standard deviation; 8.9) years and male occupied 51.7% among whole participants, whereas the higher salt intake group had significantly younger and male dominance than the lower group. The most majority was those completed secondary school followed by no educational attainment, and it is noted that the higher salt intake group were likely to achieve higher education. As the eligibility was patient with either hypertension or diabetes mellitus, most had been diagnosed of either disease at least. Average of estimated daily salt intake for three consecutive days was 9.7g (2.4), ranging from 4.0g to 19.0g. Mean of Body Mass Index and Hemoglobin A1c were 24.6kg/m2 (3.8) and 6.2% (1.2), respectively. Mean of systolic and diastolic blood pressure among total 793 participants were 149.1mmHg (19.5) ranging from 89 to 225 and 75.0mmHg (11.7) ranging from 42 to 122, respectively. The higher salt intake group had been significantly associated with hypertension affected (p=0.015).

Although perceived susceptibility and severity of CVD had no significant relation with level of salt intake, the stage of change to reduce salt intake was statistically related with substantial salt intake (p=0.012), indicating that stronger motivation to reduce salt intake were likely to associate with less salt eating. Those who had still consumed alcohol were apt to intake more salt, while smoking had no significant relation of taking salt. The participants answering they perceived to take more salty food and ferment had significantly been related with higher estimated salt intake, however we found no significant relation with salt intake in frequency of using seasoning powder like ajinomoto, because nearly daily use of seasoning were quite common among the study population. There were no statistical differences between lower and higher salt intake groups regarding support from family and health center staff to help reduction of salt intake, family size, household income, and availability of ready-to-eat meals which are most ordinary in Thai society. In addition, we examined the level of sweating on three days prior to the consequent estimation of salt intake, no significant relation between sweating experiences and estimated salt intake among the participants.

In analysis with multiple liner regression, we found relations of participants socio-demographic variables which were significant in the binary analyses. Younger age, male, higher educational attainment, and diagnosed hypertension were of significance to relate with the highly estimated salt intake. Even though adjusted for other significant variables in the binary analyses, the significant socio-demographic items were observed. Thus, we examined oddsration of such significant variables to the estimated salt intake via a logistic regression analysis. The results show that younger aging would be slightly likely to increase salt intake, and that male and having hypertension were around 1.8 folds to intake much salt than female and having no hypertension, respectively, meanwhile significance on higher educational attainment disappeared. The study revealed that aging younger, being male, achieving higher education (more than high school), and having currently hypertension were significantly contributed to high estimated salt intake among the patients of hypertension and diabetes mellitus clinic in the rural northern Thailand.
A Qualitative Study Of Teenage Driving Risks Attitude In Ciputat District, South Of Tangerang, Banten Province

Fase Badriah
Fase Badriah; Amalia Permata Sari; Mega Saraswati
Faculty of Medicine and Health Sciences, UIN Syarif Hidayatullah Jakarta, Indonesia

Teen drivers ages 16 to 19 are nearly three times more likely than drivers aged older to be in a fatal crash because underestimate dangerous situations or not be able to recognize hazardous situationa1. This risk increases with the number of teen driver, including in Indonesia and many developing countries in the world. Previous study reported that human factor or driver is 50% cause of a risk hazardous in traffic.

The study was examined of teenage motorcycle driving risks attitude in six primaries the intersection in the Ciputat District, South of Tangerang, Banten Province.

This study was qualitative research. We analyzed of teenage motorcycle driving attitude in six primaries the intersection in the Ciputat District, South of Tangerang, Banten Province. Data collected by in-depth interview and observation method in six primary of intersection in Ciputat District. Informant is 18 teen of motorcycle driver with 16-19 year ages. The data analysis used a content analysis.

The research found that all most of them have come to understand the importance of obeying road signs and ethics riding motorcycles on the highway. Unfortunately, based on their confessions, only half of those who have driving licenses, and of those who claim to have a driver's license do not all showing/bring a driver's license they have. In addition, based on compliance on the road, the majority of them admitted only obedient to traffic signs when they see a policeman on guard duty in the street or they are going to go through. They also assume that the motorcycle was the only a vehicle that is cheap, best fast to peak at the destination with road conditions existing in the region. Driving risks found to be more common among teen drivers include: excessive speeding, speeding for the thrill or simply driving too fast for the conditions; driving too close to the vehicle they are following; using a mobile phone while driving (including text messaging); violating traffic rules; and driving at night.

There are very troubling phenomenon of the increasing teenage riding their motorcycle, lacks experience drivers is expected to increase the risk of having an accident. It calls for the attention of parents, school committees, teachers, all those who are concerned with it. The study found that the risk of driving attitude even though they aware of that risky driving behavior. Unfortunately, knowing the attitude of risk does not stop some teen drivers involved in that attitude. We strong believe that teen driving risk attitudes were generally in Indonesia we suggest to act in many programs to move beyond 'awareness' education to a combination of strong graduated driver licensing programs and police enforcement.
A Study On Relationship Between Knowledge, Attitude, And Practice About Child Rearing Practices In Urban Slums In Jaipur, India

Mayamol Pradeep

Mayamol Pradeep; Ritudak; Yogendar
Academy of Medical Sciences, Kannur, India
India
pradeepmayamol@gmail.com

A study had been undertaken for assessing the relationship between knowledge, attitude and practice about prevalent social and cultural child rearing practices in slums of Jaipur city in 2011. The slums were field area of Bodh, an NGO working for the education of slum children in Rajasthan. After completing three years, children of these slums start attending Bodh schools. But till that period, how the organization could contribute to the positive development of these children were the aim of the present study. The different slums were having different background in the case of religion, occupation, cultural practices, etc. The study intended to reach certain generalization for planning intervention strategies for this group. The teachers of Bodh schools in different slums were intensively trained to do study as they have the best rapport and understanding of the families there. 5 slums were taken for study and the mothers were from mother of 0 to 3 year group children.

To study the relationship between child rearing knowledge and practice. To study the relationship between childrearing attitude and practice. To study the relationship between knowledge and attitude. To study the influence of type of family on child rearing knowledge and practice

It was a cross sectional study in 5 slums of study area. A semi structured validated questionnaire was used. The sample size was 270 and the sample was randomly selected from the available population data. Mothers of 0 to 3 years were the respondents. The tool consisted of questions on the domains of reproductive health, antenatal, intranatal, post natal (physical, nutrition, education, play and recreation, social), personal hygiene, social and cultural practices, attitude towards childrearing.

Data was analyzed and frequency tables were made for assessing the level of knowledge, attitude and practice. Chi square test was used for studying the relationship between knowledge, attitude and practice.

A highly significant relationship between knowledge and practice $X^2 = 5.3171$ with one degree of freedom was observed in all slums irrespective of the predominance of the religion, occupation and cultural practices.

Association between knowledge and attitude also showed highly significant $X^2 = 8.838(1)$ relationship except one slum. There was no significant relationship between knowledge and attitude in one slum where people of Sikh community resides.

A highly significant relationship between attitude and practice were obtained $X^2 = 7.027 (1)$ there was significant difference in the child rearing practice of mothers with good and not so good attitude.
of mothers towards child rearing except one slum. This was the same slum which had not shown any significant relationship between knowledge and attitude also.

But still cultural belief and practices which play a great role in bringing up children. They knew the minimum age for marriage is eighteen but as high as 35 to 40 percent got married between 16 and 18. They have the knowledge that it is important to visit Doctor for antenatal check up but no practice is done as that is not a cultural practice. The mothers understand the importance of giving colostrums to newborn but the elders decide not to give as culturally not accepted.

The family type was studied as joint and nuclear. There was significant difference in the knowledge level of mothers in Nuclear and Joint family. Mothers from joint family had better knowledge regarding child bearing and rearing.

So in the long way to achieve MDG for a developing country primary health care personnel should focus their efforts to change the cultural barriers for improving child rearing practices. There are good practices which should be maintained, like sex identification was not largely done.

The results of the study show that prevalent child rearing practices in the slums were influenced by 1) knowledge and attitude regarding child rearing 2) Traditional and religious beliefs (caste plays a major role) and 3) socio economic factors, education and income. The intervention program should be planned targeting the elders, parents and younger generation for giving a nurturing healthy parameters for the children in 0 to 3 year group also.
A Study On Evaluation Of The Home Healthcare Providing System In Home-Visit Nursing Station Of Japan

Takayuki Miyake
Takayuki Miyake; Eiji Satoh; Nobuo Mitsuhashi
Utsunomiya University
Japan
miyaket3@gmail.com

In Japan, medical demand is rapidly increasing because of the super aging society. In addition, much of elderly expect the medical treatment at home. Therefore, home healthcare is promoted to create a social system that can live feeling secure while receiving the necessary medical and nursing care in the area where they had lived so long in Japan.

In this study aims to reveal the areas where the home healthcare service is insufficient and the amount of the required service in the current states of system.

The targets of this study are home-visit nursing station in Tochigi Prefecture. Tochigi Prefecture is one of a provincial city in Japan. The number of employees and users of the current state are grasped by a questionnaire survey. It calculated the number of users per nurse from the result of questionnaire survey. In addition, the theoretical service providing area is calculated from the viewpoint of location of the visiting nursing station and revealed the cover situation of population using GIS.

As the results, about 90 percent of the population in the prefecture had been covered when analyzed only in the location of the home-visit nursing station. However, amount of service is insufficient even in urban area where much of the home-visit nursing station is located. In the near future, further demand of home healthcare service is expected because the elderly has increased rapidly in Japan. In recent years, home-visit nursing station tends to increase. However, it is necessary that not only increasing of the home-visit nursing station but also considering efficient management method. As future challenges, it is necessary to estimate the number of users that potential in the area in conjunction with the actual number of users.
A Study On The Pickup And Commuting Behavior Of Two-Income Households In Raising Children

Keitaro Sakaki
Keitaro Sakaki; Eiji Satoh; Nobuo Mitsuhashi
Utsunomiya University
Japan
sakaki19911214@gmail.com

In recent years in Japan, in the metropolitan area is going shortage of childcare facilities by the population concentration. On the other hand, in the regional cities are going to consolidation of childcare facilities by population outflow in progress. In addition, two-income households has increased by women's social advancement. As a result, the situation of parenting with work both parents is becoming mainstream. In such a situation, some of the household has become difficult to balance parenting and work. Therefore, in the future planning of childcare facilities, it is desirable to build a city model that reflects relationship of workplace and residence include child care structure. Therefore, in the future planning of childcare facilities, it is desirable to build a city model that reflects relationship of workplace and residence include child care structure.

This study aims to grasp the situation of two-income households that are doing the parenting with working in different cities of the urban structure.

Target areas are residential area in Tokyo (Tama City), provincial capital (Utsunomiya City) and mountainous region (Nikko City). We carried out a questionnaire survey to users of childcare facilities in each city to grasp the employment status and child-rearing situation of two-income households. The survey indexes are thinking about the work in raising children, what to seek in childcare services, employment situation and the cause of difficulty due to balance parenting and work.

The results of the analysis, pick-up time also did not differ in any city. But commuting time was the longest in Tama, and it was the shortest in Nikko. In addition, burden of mother has been heavy because the pickup has been conducted by mother mainly. Father has not been able to participate in the child-rearing because of the long working hours. This trend has become more pronounced along with urbanization. Among the men and women participation advances, in order to promote parenting by both parents, it is necessary to reform the employment form both the society level and the individual level.
A Study On The Service Area And Administration Of Home-Help Services

Yasuhiro Nohara

Yasuhiro Nohara; Eiji Satoh; Nobuo Mitsuhashi
Graduate school of Engineering, Utsunomiya University
Japan
kochinndada@yahoo.co.jp

Currently in Japan, the system called Regional Comprehensive Care has started in April 2015. This system aims to reconsider the way of flexible and detailed methods of welfare service for elderly, and to suit care needs of the elderly who need at-home care in the community. On the other hand, increasing suppression of social security costs, measures to bearer lack of care, efficient use of nursing resources is a major issue.

This study examines the service area and the amount of service from administration of home-help services, and we study the providing methods of home-help services through a case study of provincial town in Japan.

The target area of this study is Takanezawa Town, one of the provincial towns in Tochigi Prefecture, with the population of around 30,000 people. Subject facilities are three of home-help services. The research is conducted in the following procedure. First, grasp the amount of services such as a time frame and frequency of home visit from the monthly work schedule of home helper. And make a database of activity of each home helper on target area. Second, using GIS, calculate distance and time for trip of a day based on time schedule of home helper (order and location of visit, care time). And analyze the service area of home-help services.

The result of the analysis is as follows. 1) The service area has a tendency to increase in proportion to the number of home helper. 2) The size of service area is affected by management type. Management type of direct-attendance and direct-return has a tendency to increase the travel distance of home helper.

From these results, by each home-help services has a more compact and efficient service delivery area, it is considered to be able to provide a flexibly corresponding detailed services to the increase in needs.
Adherence Of Combination Therapy Among Hypertensive Patients Aged 30 - 65 At Bojonggede's Public Health Center, Bogor Regency, West Java, Indonesia

Lulu Octaviani
Lulu Octaviani; Ratu Ayu Dewi Sartika
Universitas Indonesia
Indonesia
luluoctaviani19@gmail.com

Bogor is one regency in West Java with high prevalence of hypertension, however the adherence of combination therapy among hypertensive patients in Bogor still poor. To avoid complications, hypertensive patients have to adhere combination therapy that suits with the recommendations of JNC 7.

This study aimed to identify factors which associated with adherence of combination therapy on hypertensive patients at Bojonggedes Public Health Center, Bogor Regency, West Java.

This study used cross sectional design with purposive sampling method. This study conducted by 105 hypertensive patients aged 30 years who regularly went to the public health center for 3 months respectively. Patients adherence was assessed through six components: adherence of maintain the body weight, run the DASH and low-salt diet, physical activity, limiting alcohol intake, and taking medication.

The results showed that adherence of hypertensive patients in maintaining body weight was 26.7%, DASH 44.8%, low-salt diet 61.9%, physical activity 48.6%, limiting consumption of alcohol 100%, and taking drugs 25.7%. In general, the adherence of combination therapy on hypertensive patients was 40%. There were significant associations between age (OR = 0.301) and health providers support (OR = 2.769) with adherence of combination therapy. To improve the adherence of combination therapy on hypertensive patients, there should be a program which developed by public health center/posbindu. This program should emphasize the benefits and advantages of combination therapy, so hypertensive patients have desire and high awareness to prevent complication of the disease.
Age And Type Of Food First Introduced For Complementary Feeding In Infants

Triska Susila Nindya
Triska Susila Nindya; Lailatul Muniroh
Universitas Airlangga
Indonesia
triskasnindya@yahoo.com

Complementary feeding is the process to introduce food in infant's diet. WHO's recommended that solid foods should be introduced around the age of 6 months alongside breastfeeding, with consideration given to developmental signs of readiness including self-sitting; co-ordination of hands, eyes and mouth necessary for self-feeding; and swallowing of food. Both in developed and developing countries research indicated that the majority of mothers introduce solid foods before the recommended age of around 6 months. Early weaning has been associated to the higher risk of overweight and obesity in children.

The objective of this study was to obtain information when and what type of food that first introduced during complementary feeding period in infants.

This was cross sectional study conducted in 116 infant age 6-11 months in sub district of Mulyorejo and Kenjeran Surabaya East Java. Structured questionnaire and 24 hour recall was used to obtain the information on complementary feeding.

Age introduced to complementary food was majority less than six months (48.3%). Type of food that first introduced was commercial porridge (42.2%) and homemade porridge (31.0%). Majority of mothers provided three times feeding for infants. Based on recent dietary intake almost seventy percents of infants did not consume vegetable, particularly orange and dark green leafy vegetables. Fruits rich in vitamin A only were consumed by ten percent of infants during preceding day. Vegetables and fruits are often not included in infant complementary feeding. It is necessary to promote the first age to introduce complementary feeding should be on six months and advantages on vegetables and fruits consumption in the infant feeding periods.
An Analysis Of Dietary Sodium Potassium Ratio At Mayo Diet Catering In Surabaya

Farapti
Farapti
Departemen of Nutrition, Faculty of Public Health, Airlangga University, Surabaya Indonesia
Indonesia
faraptilala@yahoo.co.id

The consumption of highly salted processed foods and deficient in fruits and vegetables (FV) causes the modern human diet is both excessive in sodium and deficient in potassium. The epidemiologic evidence indicates that dietary sodium potassium ratio in adult higher than RDA recommended (0.32-0.49). Mayo diet, dietary calorie restriction-induced weight loss is healthy diet containing highly FV and low salt.

The aim was to assess and analysis of dietary sodium potassium ratio at mayo diet catering in Surabaya

We conducted observational analysis of all meals/ foods in Kartikasari mayo diet catering in Surabaya. The program of mayo diet was 13 days and the packaged foods were provided at 1 weekly intervals consisting of lunch and dinner meals. For breakfast, consumers recommended to eat a slice of bread and a cup of tea/ coffee. Every foodstuff was measured by weighing scale, recorded as units of grams, and calculated the calorie, sodium and potassium content using nutrisurvey program. We used descriptive statistic to calculate dietary sodium potassium ratio of packaged foods per serving and per day and showed it as mean/ median and distribution (SD, range). We used SPSS version 21 for all analysis

All foods cooked without salt. The mean dietary sodium potassium ratio per day was 0.37±0.26 with median value was 0.38 (0.07-1.14). For lunch and dinner the median dietary sodium potassium ratio per serving was 0.25(0.07-1.14) and 0.24(0.12-0.79) respectively. The mean calorie of mayo diet was categorized extrim calorie restriction 703.59±73.99 kcal/day. Conclusion Both dietary sodium potassium ratio per day and per serving of mayo diet catering in Surabaya were indicated slightly lower than RDA recommended. A long-term low sodium diet can cause electrolyte imbalance and health problems. Containing lot of FV, the lunch and dinner meals of mayo diet can be recommended as healthy foods but it is needed to adjust the calorie and monitor of consumers health status
Analysis Of The Influence Nurse Career Expectation And Characteristics To The Job Performance In Hospital

Achmad Zakaria  
Achmad Zakaria  
Airlangga University  
Indonesia  
achmad1970zakaria@gmail.com

Inhospital services, the provider who get the spotlight very much, because it influences the patient's satisfaction is a nurse. Even the presence and touch of nursing service have the largest proportion of services at home. The factshowed thateleven studies and surveys on patient satisfaction in the hospital that no one got the result more than 90% satisfied with the nursing care in the hospital. As a consequence of nursing services should be supported by professional nursing personnel. One effort is to improve the professionalism of nursing is through the development of the nursing career, because the career is the expectation of work life of nurse who is closely related to job performance.

Proving the influence of the nurse career expectation and characteristics to the job performance. The research design analyzed the relationship between the career expectation and job performance is cross sectional. The sample were all staff nurses in Swadana hospital at Jombang, of 168 nurses who qualify as many as 128 people. Collecting data about aspects of career expectation and job performance were collected through questionnaires and direct assessment by the head of the room. The processing and data analysis were done by using computer application. To examine the relationship between the characteristic, the career expectation and the job performance by using chi-square test, as well as multiple logistic regression analysis to predict the factors that most influence on performance.

Based on the analysis we found the proportion of career expectations and the performance of staff nurses in Swadana hospital at Jombang were low, 53.9% of 128 respondents had lower career expectation and 55.5% had low performance. The statistical analysis results were significant effects between career expectation and the performance, there was a tendency of nurses who had high career expectation had low performance. The gender and the level of education had a significant relationship between the career expectation and performance, where men tended to have high career expectation but women tended to have higher performance. Based on these results, therefore it was to improve the performance of nurses in the management of the hospital to give more attentions to the nurse career life structurally and functionally, through planning and career development of individuals and organizations.
Analysis Of College Student Healthcare Needs And Its Financing In National Health Insurance Era

Nuzulul Kusuma Putri
Nuzulul Kusuma Putri; Ernawaty
Universitas Airlangga
Indonesia
putri.nuzulul@gmail.com

Mostly State University (PTN) in Indonesia has been managing student health service independently before the enactment of the National Health Insurance (JKN). Health care is financed through student health insurance which managed independently by university and limited only for its students. The premium was paid in the same time when student paid tuition fee every semester. JKN force universities to make changes in this health finance scheme.

This study aimed to analyze the needs of health care for college students during education and its financing in the era of National Health Insurance.

This is exploratory study with cross sectional design applied. Samples were taken through voluntary sample by an online questionnaire. There were 83 undergraduate and diploma students from a state university in Surabaya participated in this survey. Data were also obtained by interviewing managers of student clinic in the same university.

The majority of respondents (65.1%) were immigrant students hometown was not Surabaya. Not all (52.9%) immigrant students had membership of National Health Insurance; moreover 35.3% of immigrant students did not have any health insurance. The majority of immigrant students (93.3%) who have covered by National Health Insurance were registered their primary health care in their hometown. Most of students spent approximatelly 150,000 Rupiahs for every visitation to general practitioners in Surabaya outside the university clinic. Most of them were regular undergraduate students who already charged by Single Tuition Fee (UKT) which had unclear amount of funds for health insurance that could be managed by university. Benefits packages received by students at the university clinic were depending on the type of payment of tuition fees. Students were also reluctant moving their primary care to be near to Surabaya which made immigrant students could not access the National Health Insurance. Most of college students do not protected by health insurance during their existence in education city. Before the imposition of single tuition fee and national health insurance, health needs are met through health insurance which managed independently by the university. Single tuition fee and national health insurance policy have forced universities to immediately rearrange the student health financing system.
Analysis Of Health Problems In Salatiga City, Central Java, 2014

Nurvita Wikansari
Nurvita Wikansari; Priscila E. Asa; Dibyo Pramono; Dyah Woro Widarsih
Universitas Gadjah Mada
Indonesia
nurvita.wikansari@gmail.com

In order to achieve Healthy Salatiga, Salatiga City Health development efforts can not be carried out by the health sector alone, but must be done holistically together stakeholders, across sectors and communities. Health activities of development program undertaken by the health sector and non-health-related health problems, is the data or facts that should be noted and well managed in an information system. The role of data and health information development programs increasingly necessary for decision-making in each program, the stages and levels of administration.

To describe the situation a public health problem in Salatiga City, 2014. The analysis of health problems is a observational descriptive study, that analyzing data from Health Department Salatiga City. As for priority health problems determined using Hanlon Qualitative method and priority health efforts using CARL method. Hanlon method consist of urgency, seriousness, and growth. CARL method consists of capability, accessibility, readiness, leverage.

The priority health problems from Hanlon Qualitative methods are HIV/AIDS (10.93), Infant Mortality Rate (10.33), and Child Mortality Rate Under 5 Years (9.80). The priority health efforts by CARL method are Coverage of Child Under 5 Years Got Vitamin A (138.67), Coverage of Infant Complete Basics Immunization (115.67 ), and Coverage of Child Under 5 Years Weighed (113.53 ). Hanlon and CARL method can be used as a tool to compare health problems and not difficult to apply in Health Department. Based on these results, Health Department Salatiga more focused on the top three health problems are HIV/AIDS, Infant Mortality Rate (IMR), and Child Mortality Rate Under 5 Years. Hanlon and CARL expected method can be applied at the Health Department to resolving issues contained in the Health Department.
Analysis Of Lead (Pb) Content In Used Cooking Oil Used By Fried Traders In Makassar, South Sulawesi

Ella Andayanie, SKM, M.Kes
Yuliati, ST,M.Kes; Nur Ulmy Mahmud, SKM, M.Kes; Ella Andayanie, SKM, M.Kes
Universitas Muslim Indonesia
Indonesia
nurulmymahmud@yahoo.com

Indonesian people today are very familiar with fast food such as fried foods that are commonly sold on the streets or in crowded places. Lifestyles that are increasingly demanding time efficiency leads people to consume foods that doesn’t require a long time to be processed and presented. One aspect of the fried food that makes it less safe to consume is lead (Pb) content from vehicle.

The aim of this study was to determine the content of lead (Pb) in used frying oil, used by fried trader in Makassar.

This was a descriptive study with observational approach. The population in this research consist of 7 fried traders located in Urip Sumoharjo, Toddopuli Raya and in Perintis Kemerdekaan. This study used porpusive sampling method involving 7 fried trader.

The lowest level of lead (Pb) content in used frying oil coming from traders who sell at the intersection area of Perintis Kemerdekaan (Daya) (0.3820 ppm) and highest level is coming from traders who sell at the intersection of Perintis Kemerdekaan (Sudiang) (0.1297 ppm) which is categorized over the maximum limit (0.1 ppm) by BPOM (2009).

Lack of knowledge found at the intersection of Toddopuli Raya Timur, Batua Raya - Abd. Dg. Sirua, Perintis Kemerdekaan (Sudiang) and intersection of Perintis Kemerdekaan (Mandai). Fine level of traders attitude found at the intersection of Perinti Kemerdekaan (Daya) and at the intersection of Urip Sumoharjo - Jln. H. Kalla. Less level of traders attitude found at the junction of Urip Sumoharjo - Antariksa, intersection of Toddopuli Raya Timur, intersection of Batua Raya- Abd. Dg. Sirua, intersection of Perintis Kemerdekaan (Sudiang) and fried traders who sell at the intersection of Perintis Kemerdekaan (Mandai). Frieds traders action all categorized enough.

Based on the results of this study, it is expected that government and Makassar City Health Department held a counseling programme for fried traders about lead (Pb) contamination through food. Society are expected to reduce their fried food consumption that are sold at the roadside, especially around the area of the traffic light in Makassar.
The number of motor vehicles in Makassar City in 2011 is 961,134 units or approximately 43.94% of the total vehicles in South Sulawesi Province. Contribution of acid gas like Sulfur Dioxide (SO2) and Nitrogen Dioxide (NO2) which is produced from the burning of fossil fuels will cause the acidity of the atmosphere, further causing environmental problems with the occurrence of acid deposition, either dry or wet deposition.

This research aims to determine quality of dry and wet deposition in Makassar City. The type of this observational research is quantitative with descriptive approach.

The result of research shows the average value of SO2 concentrations were 40,378 g/Nm3 and the average value of NO2 concentrations were 50,031 g/Nm3, both are still eligible in accordance with Regulation of South Sulawesi Governor Number 69 in 2010. The average value of the pH of rainwater was 6.63 which is still qualify from the WHO standard that is more than 5.66 whereas the average value of conductivity is 32.3 S/cm which is still qualify the value of the conductivity of normal rain water by Sanders that is less than 100 S/cm. Quality of dry deposition in Makassar City has not reached the hazard point because the content of SO2 and NO2 concentrations are lower that the accepted value, similarly, wet deposition in Makassar City was also not reached the dangerous point yet because of pH and electrical conductivity of rainwater are still eligible.
Analytical Study On Revised Japanese Health Education Textbooks For Senior High School Students On Drug Issues

Suketaka Iwanaga
Suketaka Iwanaga; Keiko Kusaka; Kazuyoshi Harano; Kazunari Satomura
Kyoto University
Japan
iwanaga.at.work@gmail.com

The loophole drugs related affairs among young Japanese have been increasing sharply since some years ago. As the new school curriculum guidelines by the government were announced in 2009, the textbooks for senior high school students have been revised since 2013.

The descriptions of the textbooks are investigated to understand the current condition and controversial points of drug abuse prevention education.

All the three kinds of health education textbooks in use in senior high schools in Japan were analyzed for comparison. An interview to a staff of one of the publishers was performed to know their circumstances.

Only one textbook mentions that even a single use is already abuse, and two mention that can kill. All note that the drug abuse is illegal but not all note that drug is a funding source of underworld. No textbooks use the words, lawful and loophole and give correct information that loophole drugs are not lawful and illicit. Publishers edit textbooks according to the guidelines by two years before the enforcement and once submitted to the Ministry, the contents of the textbooks are not allowed to reedit.

Detail descriptions on loophole drugs were expected in the newly revised textbooks, but none of them has any mention. Different descriptions might make bias of the knowledge of the learners. The time-consuming authorization system may not produce up-to-date textbooks. Supplementary instructions are recommendable with enlightened consideration and efforts of the teachers in spite of limited class hours.
Analyzing Factors Affecting Unwillingness Of Reproductive Couple Using Contraceptives In East Java Indonesia: Using Spatial Lag Regression

Diah Indriani
Diah Indriani; Yuly Sulistyori
Universitas Airlangga
Indonesia
diah.indriani@gmail.com

Crude Birth Rate in East Java is still quite high at 13.3 per 1000 population. But unwillingness of reproductive couples using contraception remains high in East Java, which is an average of 16.3% per districts. The highest is 37.98% occurred in Bangkalan. The high of unmet need is one cause of high population growth. According to the concept of fertility by Freedman (1983), the motivation to perform birth control is influenced by the needs of children, number of children, access to birth control consultation services, access to services of contraceptives, birth history has ever experienced, socioeconomic, cultural norms and environmental conditions. Trend analysis of the causes of unwillingness of reproductive couples using contraception has been widely studied by analysis approach individually. This study will examine the spatial approach. Spatial approach can shoot territorial uniqueness.

This study determine the factors that led to an unwillingness couple using contraception with a spatial approach. Spatial conditions or the uniqueness of the region has been hypothesized as a potential cause of the unwillingness of couples using contraceptives. Spatial analysis approach is to see the uniqueness in terms of areal.

This study uses secondary data from national socioeconomic survey in 2012 and from East Java Province in Figure 2012. Both surveys were conducted by BPS (Central Data and Statistics) in East Java. The variables studied were education, number of children, expenditure, culture, access to health services. The analysis used in this study is the spatial lag regression. The operational definition of education is the percentage of people aged over 10 years who have never been to formal education per district. The operational definition of number of children is percentage of family who has two surviving children, three surviving children and four surviving children per district. The operational definition of expenditure is the percentage of non-food expenditure per district. The operational definition of culture is East Java has a variety of cultural characteristics in their communities, Madurese culture, coastal culture, Arek culture and Mataraman culture. The operational definition of access to health services is the number of health facility and the number of medical personnel per district. Secondary data is the data for the population of East Java Indonesia. This study was using spatial lag regression to analyze the spatial effect of the unwillingness of reproductive couples using contraception.

Amounted to 24.8% of the population has never been formal education. Spending the majority of the population 51.6% for non food expenditures. Only 7.3% of population spending over 1 million. Amounted to 29.9% of the population have two surviving children, 18.6% of the population have three surviving children, 8.6% of the population have four surviving children. An average of 1.7 primary health care serve 1000 residents. An average of 1.3 medical personal serve 1000 residents.
Spatial dependence analysis was significantly affect unwillingness couples of using contraception ($p$-value 0.001). Factors affecting was (see Appendix Table 1): spending over 1 million ($p$-value 0.013), number of children ($p$ value 0.07), availability healthcare ($p$-value 0.012) and the presence of medical personnel ($p$-value 0.001). Culture does not affect the unwillingness couples of using contraception with a $p$-value of 0.801. And the highest influence is from the number of medical personnel. Culture influent unwillingness of reproductive couples using contraception with $p$-value 0.0046 in Morans I test. Morans I was spatial autocorrelation between two variables. And non-food expenditure also influent unwillingness of reproductive couples using contraception with $p$-value 0.0135 in Morans I test. The higher spending, the fewer the number of children, the easier access to healthcare (number of health care, the number of medical personnel) was affecting increase of the willingness of couples using contraceptives. Culture and non-food expenditure was also affecting of the willingness of couples using contraceptives when it was analyzed in partial analysis. Increasing fulfillment of basic needs, causing a person will be able to meet the secondary requirement. The use of contraceptives is a secondary requirement, so if someone can not meet their basic needs (food, clothing, shelter, health), the use of contraceptives into insignificance. Nowdays, the fulfillment of contraception aid for poor families is already a program that has been running for a long time. But, the percentage of couples unwillingness to use contraceptives is still quite large, especially in certain regions. Although contraception is already free for poor families, but if access to the place of health services, the number of health facilities and the health workers who support the use of contraceptives is not sufficient, hence the desire to use a contraceptives is also diminishing. The need for children who are affected by culture is also a factor that affects the desire use contraceptives. Many conditions must intervene to increase the willingness of couples use contraceptives. Approaches ranging from physical access as well as non-physical integrated with better monitoring can be considered to do the family planning program.
Analyzing Midwives' Competence Toward Urban Based Maternal Health Problem

Nuzulul Kusuma Putri
Nuzulul Kusuma Putri; Ratna Dwi Wulandari; Nyoman Anita Damayanti
Universitas Airlangga
Indonesia
putri.nuzulul@yahoo.com

Generally high maternal mortality rate in Indonesia mostly happen in urban area. The physical accessibility of midwifery services in urban seems not guarantee the healthy pregnancy of its population. This also happen in Surabaya which contributed to more than 16% maternal deaths in East Java.

This study aimed to analyze urban based maternal health problem and the capability of midwifery services handling those problems.

This is an exploratory study in 2 industrial sub districts, Medokan Ayu and Gunung Anyar sub districts, that mostly settled by urban migrants. Total population of midwives in Public Health Centre were asked about their experience in handling maternal health in the sub district population. Midwives competence tested using partial national midwife competencies examination.

This study shows that both in Medokan Ayu and Gunung Anyar sub districts, the main maternal health problems was the classical problem of medical equipment and drug availability. It implies that the root cause of problem are not about the physical accessibility but tend to be caused by planning and financing in government health institution. In both sub districts, the midwives competence is mostly excellent even with low participation rate in midwifery training. In handling those problems, coping strategy were created by designing mother coaching programs that useful for referral decision in institutional level.
Association Between ANC (Antenatal Care) Frequency And Occurrence Of Perinatal Death In Indonesia Year 2012: Analysis Of SDKI, 2012.

Yenny Puspitasari
Yenny Puspitasari; Kusharisupeni Djokosujono; Sandra Fikawati; Mondastri K Sudaryo
Health District of Tulang Bawang, Lampung, Indonesia; Faculty of Public Health (FKM) Universitas Indonesia, Depok, Indonesia.
Indonesia
yennyps80@gmail.com

Most of neonatal death (78.5%) occurred at the age of 0-6 days. The quality of ANC can affect the health of pregnant mothers and their fetus. Mothers health program in Indonesia recommends that every pregnant mother should make at least 4 visits of ANC, based on 1-1-2 schedule, i.e. at least 1 visit in first trimester, 1 visit in second trimester and 2 visits in third trimester. SDKI data 2012 showed that 74% of pregnant mothers have met the recommended ANC schedule (i.e. ANC 1-1-2) which is still below 95%, the national target of mother health program.

This study was aimed to know association between ANC visit and perinatal death in Indonesia year 2012. This study is done in case control design. We used unconditional multiple logistic regression to analyze 190 cases of perinatal death, compared to 380 controls of live birth. All cases and the randomly selected controls were taken from national basic health survey data of SDKI in 2012.

The result showed that inadequate ANC frequency is significantly associated with perinatal death with OR 2.0 (95% CI : 1.43-3.71; p-value< 0.05), adjusted by age of pregnant mothers. There were indication of interactions between ANC and pregnancy complication and between ANC and age of pregnant mothers. As the result confirmed the significant effect of inadequate ANC frequency on the increase risk of perinatal death, it is necessary to increase information and knowledge to pregnant mothers concerning the importance of adequate ANC in order to detect earlier the pregnancy complications.
Atribute Of Tuberculosis Surveillance System In Health Office Of Gresik District

Arina Mufida Ersanti
Arina Mufida Ersanti ; Atik Choirul Hidayah ; Agung Nugroho
Airlangga University
Indonesia
arina.mufida@gmail.com

Tuberculosis is one of the health problems in Indonesia unresolved. Based on Indonesia’s health profile 2013, East Java was ranked second after West Java with new cases of smear-positive pulmonary TB. The number of new cases of smear-positive pulmonary TB in West Java is 33.460 inhabitants, while in East Java amount 22.703 inhabitants. In Gresik based on result of analysis of health problems identified 13 health issues in Health Office of Gresik District and TB be one of them. TB problem in Gresik related with has not been achieved the target for Case Detection Rate by 70%. Precisely CDR value is likely to decline in 2012 amounted to 64.19%, in 2013 amounted to 56.04% and in 2014 decreased to 55.13%. Problems TB control efforts require adequate and comprehensive. Such efforts can work correctly if supported by a good surveillance system, so prevention programs more effective TB control both in terms of planning, control, monitoring and evaluation of programs.

The purpose of this study was to describe the result evaluation of TB surveillance system based on a attributes approach and alternative solution. This study is an evaluation research. Subjects were tuberculosis surveillance system conducted in Health Office of Gresik District. Respondents in this study include Head Section of disease eradication, TB program managers and surveillance officers in 14 health centers that get into the working area of the Health Office of Gresik District. Determination of health centers that will be the subject of research conducted with cluster is to divide the working area of the District Health Office Gresik into 4 sections (North, Central, South and City). Each region take part in all health centers and each health center References References Microscopic Microscopic (PRM) taken 1 PHC Satellite (PS) which is entered into the working area of the PRM randomized.

Data used in the form of primary and secondary data. Primary data obtained from interviews with holder TB program using questionnaires and observation sheets which aims to collect information related to the implementation of TB surveillance in Health Office of Gresik District. As for the secondary data obtained from the health office district or health center in the form of health profiles, reports of discovery and treatment of TB patients, a report on the treatment of patients with TB, sputum microscopic examination report late early stages, TB registers basic data related to human resources. As well as data obtained from the study documents such as information related to the timeliness, positive predictive value, acceptability and quality of data.

Data analysis will be performed descriptively by comparing the results of the field with guide control TB in 2014, Kepmenkes RI No. 1116/SK/VIII/2003 and Guidleness Evaluation for Public Health Surveillance System of the CDC 2001.
Evaluation System Surveillance of Tuberculosis in Puskesmas and Health Office of Gresik District with attributes approach: 1. Simplicity, the surveillance system is assessed not simple related to the case definition, the number of institutions involved, training needs, recapitulation of data, as well as data analysis activities. Meanwhile, if judged from the amount and types of data, maintenance, integration with other systems, processing data surveillance system of TB is simple; 2. Flexibility, TB system has received a lot of changes one of them changes have occurred related with the reporting from manual reporting system turn into on-line using SITT(Integrated Tuberculosis Information System). Changes the reporting system is thought to lead to increased costs, time and energy. So that the system is judged to be flexible; 3. Acceptability, acceptability is the ability of the surveillance system to accepted, seen from the data source reported, accuracy and completeness of the report. Source rapporteur a participant to report if find cases or suspect of TB have not been all play an active role albeit for completeness and accuracy report in both groups. Beside it also for output generated from surveillance activities have been acceptable. So the system is considered to be acceptable; 4. Data Quality, data quality reflects the completeness and validity of the data recorded in the public health surveillance system. Based on the results of the cross test is unknown if in the examination of cases of TB in the laboratory there is a small error of 2.23 and a big mistake as much as one that occurred at the Hospital of Semen Gresik. Thus concluded TB surveillance system based on poor data quality include; 5. Timeliness, describes the ability of the surveillance system in controlling the time for reports related to the accuracy of the reporting from sources that can be used stakeholders to take the right decision. Data collection should be reported in Health Office of Gresik District every quarter on December 5. According to the calculation accuracy of the reports received visits from reporting attendance was 92.97%. So that it can be concluded timeliness in either system; 6. Stability, refers to the stability or the ability of facilities/devices that are used to support surveillance systems based on the frequency error when the operation. TB is supported by Sitt for the reporting. Based on the results of interviews is unknown if the 55% of respondents stated if Sitt never encountered an error, while 45% stated other woods if Sitt has experienced an error. Because the percentage who said never error <80% it is concluded if the TB surveillance system unstable; 7. Positive Predictive Value, PPV refers to the proportion of suspects were positively identified by the system and according to laboratory tests compared to the total number of suspected cases. Here is how to calculate the PPV

\[
PPV = \frac{TP}{(TP+KH+PPT)} \times 100\%
\]

\[
PPV = \frac{269}{(269+2+0)} \times 100\% = 99.26
\]

So Positive Predictive Value could be conclude it’s good
Avian Influenza (AI) infection results in cases with high fatality rates in Indonesia. To know one of determinant preventing AI virus spreading, the description of bio-security in chicken farms in West Java and Banten, as the highest cases took place, was studied.

To know one of determinant preventing AI virus spreading, the description of bio-security in chicken farms in West Java and Banten, as the highest cases took place

The data were collected in 2012/2013 by visiting 114 chicken-farms in sector-3 category, purposively selected in 6 districts. Interview to farm manager and observation were employed using structured questionnaire with moderate Cronbach alpha coefficient of instrument reliability.

Most farms have poor bio-security condition (score of around 30%), satisfied knowledge level on bio-security (score of 88%), and weak farmer’s behavior in implementing bio-security (score of 36%). Association was revealed between bio-security condition and bio-security behavior implementation, farm status, and district, but weak relationship between knowledge and both bio-security behavior or bio-security condition.

It calls for increasing bio-security implementation in sector-3 chicken farms through assistance provided by sector-1 chicken farmers in the region.
Blood Glucose Levels Of Government Employee Direktorat Jenderal Perimbangan Keuangan Ministry Of Monetary Indonesia

Hafifatul Auliya Rahmy
Hafifatul Auliya Rahmy; Triyanti; Ratu Ayu Dewi Sartika
Department of Nutrition, Faculty of Public Health, Universitas Indonesia Indonesia
hafifatulauliya rahmy@yahoo.com

Diabetes mellitus (DM) is a metabolic disease with characteristics of hyperglycemia marked by the increase in blood glucose levels and cause death about 4% of the total deaths in world and 3% in Indonesia.

This study aims to screening of DM and to determine the factors such as age, sex, physical activity, nutrient status (BMI (Body Mass Index) and WHR (Waist Hip ratio)), knowledge of DM, intake of nutrients, family history of diabetes, and frequency of consumption of fruit vegetable consumption associated with random blood glucose.

This cross-sectional study have samples 147 people were chosen by random sampling. Measurement of random blood glucose using Accu Check, socio-demographic, family history of DM and knowledge of DM were collected using questionnaires, physical activity were collected using IPAQ, BMI measurements which included weight and height recorded to the nearest 0.1 cm and 0.1 kg, WHR are measured by soft measuring tape, dietary intake was assessed used 2x24 recall and frequency of consumption of fruits vegetables using FFQ. Statistical tests used T-independent test, simple linear regression and multiple linear regression.

The average blood glucose level obtained is 177.52 ± 25.99 mg/dl and 68% as prediabetes. Prediabetes is a condition of the blood sugar levels above normal, but not yet meet the criteria for a diagnosis of diabetes. This condition is a critical stage in which if not carried out changes in lifestyle patterns toward healthier lifestyles. The prevalence of prediabetes is higher than the prevalence diabetes. Prediabetes can turn into diabetes 5-10% per year. Family history of diabetes, BMI, WHR, frequency of consumption of fruit and vegetable consumption has a significant association with blood glucose levels (p value < 0.05). While others showed no significant association with blood glucose levels. On multivariate analysis of independent variables that affect blood glucose levels is the acts of DM on the family, BMI, frequency of consumption of fruit and vegetable consumption with coefficients determined 0.219. Nutrition status, consumption of fruit vegetable and family history of diabetes associated with blood glucose levels. Changes in the lifestyles of high-risk subjects can prevent DM.
Body Composition Changes On Postpartum Mothers : Exclusive Vs Non-Exclusive Breastfeeding

Ajeng Arumsari Yayi Pramesti
Ajeng Arumsari Yayi Pramesti; Aini Kusmayanti; Yayuk Hartriyanti
Universitas Indonesia
Indonesia
ajengarumsari@gmail.com

Body composition changes (fat mass and free fat mass) is more important than weight loss only. Most of obesity in old women is related with body composition that did not back to normal after delivery a baby. Previous studies showed that exclusive breastfeeding is important factor for reducing fat mass and free fat mass on postpartum mothers.

This study aim to describe body composition changes on exclusive and non-exclusive breastfeeding mothers.

This was a longitudinal survey as long as six months conducted in Yogyakarta. We recruited 32 postpartum mothers and followed them from 1st until 6th month post-partum. Fat mass and free fat mass were measured using skinfold caliper. Social demographic data and breastfeeding status were collected using a structural questionnaire.

Most of respondents were in second parity (36.7%), housewives (43.3%), did not give exclusive breastfeeding (87%), and had education until university (80%). In exclusive breastfeeding group fat mass changes were 1.31 ± 0.79 (1-4 months), -0.12 ± 0.69 (4-5 months), -0.88 ± 1.59 (5-6 months). Further, free fat mass changes were -0.15 ± 2.05 (1-4 months), 0.70 ± 1.55 (4-5 months), 0.37 ± 0.46 (5-6 months). In non-exclusive breastfeeding group fat mass changes were 0.01 ± 1.67 (1-4 months), -0.17 ± 1.66 (4-5 months), -0.17 ± 0.99 (5-6 months). Further, free fat mass changes were -0.68 ± 2.47 (1-4 months), 1.01 ± 2.52 (4-5 months), 0.27 ± 1.08 (5-6 months). The trend of body composition changes in six months post-partum mothers were not different in both exclusive and non-exclusive breastfeeding group. However, fat mass and free fat mass reduction were higher in exclusive breastfeeding group than non exclusive breastfeeding group. Fat mass and free fat mass reduction can be raised to support exclusive breastfeeding campaign.
Breastfeeding Facilities Case Study In Mall In South Jakarta

Galih Permana, SE
Galih Permana, SE ; Rina Wahyu Wijayani, SE ; Nisa Kamila, SE
Universitas Indonesia
Indonesia
nisakamilao7@gmail.com

The importance of breastfeeding is become main issues nowadays. Theres an increasly awareness of breast milk needs to a baby among the mothers. As endorsement to this matters, Goverment had established PP no 33/2012 about ekslusive breast feeding and Permenkes no 15/2013 about standard of breastfeeding facilities. These regulation give an obligation for working facility and publict facility provider to provide a spesial room for mother to do breastfeeding or pumping their breast milk. The big question, are the publict facility provide sufficient breastfeeding facilities for their worker and customer.

This study want to show is the publict facility such as mall in Jakarta already provide enough breastfeeding facilities according to regulation and and to find out the relationship between the development year of a mall with availability breastfeeding facilities

This study used observasional study on 29 mall in South Jakarta Region. This study was held in south jakarta region because this region has the most mall compared to other region. This study used observasional study and cross sectio

The study show that if most of the malls have had breastfeeding rooms. There are 19 malls that have breastfeeding rooms (65.5%) and only 10 malls have no breastfeeding rooms (34.5%). Based on the observation, there are only 8 malls have more than one breastfeeding room and the other 11 malls have only one breastfeeding room. Mall that build after year 2000 provide 88.9% or it provide a breast feeding facilities and 11.1% not. For mall that build before year 2000 only 27.3% that provide with a breast feeding facilities. Statistict test using fischer exact test (p = 0.001) found that theres a significant relation on years of mall has built and providing of an breast feeding facilities. This study also use cross sectional study with result mall that build before year 2000 has 21.33 risk not having a breast feeding facilities (OR= 21.33, p=0.001)
Cervical Cancer Screening: Acceptability Of Self-Sampling For HPV-DNA Testing Among Malaysian Women

Yut-Lin Wong
*Yut-Lin Wong; Tin Tin Su; Si Lay Khaing; and Karen Morgan*
University of Malaya
Malaysia
wongyl@ummc.edu.my

The Asia-Pacific region contributes to 51.6% of global cervical cancer cases and 59.3% of cervical cancer deaths. In Malaysia, cervical cancer is now the second most common cancer and is the fourth common cause of death among women. Despite implementation of the national Pap smear screening program since 1969, the National Health and Morbidity Survey reported that 26% of women had undergone screening in 1996 and in 2011, uptake had decreased as the highest screening uptake seen among the 40-44 years age group was only at 21.9%. Late detection of cervical cancer resulting in increasing mortality is an urgent issue in Malaysia. These may be due to barriers to Pap smear screening, such as, discomfort towards male physicians, embarrassment, privacy, culture and religious factors. Thus, self-sampling for HPV-DNA testing is a potential alternative screening test that can increase cervical cancer screening uptake. Unlike Pap smears that require a doctor to collect the specimen, self-sampling enables women to directly obtain a cervico-vaginal sample by intravaginal insertion of a swab, tampon, or cytobrush; and the sample is subsequently sent for HPV-DNA testing. Self-sampling can be done at home or in a clinical setting.

This paper explored the acceptability of self-sampling for HPV-DNA testing among Malaysian women. In-depth interviews (IDI) were conducted with married women based on purposive sampling of hospital clients and low-income community after research ethics approval by University of Malaya Medical Centre (Ref No: 944.19). Theoretical sampling yielded 4 groups of respondents: ever did Pap smear; ever did self-sampling; ever did Pap smear and self-sampling; and never screened. IDI were transcribed verbatim, checked, and subsequently managed and analyzed using NVIVO Version 9.

Majority of the 24 multi-ethnic respondents had secondary-level education. Average age was 39 years. Those who were amenable to self-sampling cited privacy, less embarrassment, more in control (pain/comfort), time-saving as advantages over Pap smear test. Yet, others did not find self-sampling to be more convenient and preferred Pap smear. Many also expressed concerns and doubts about self-sampling. Self efficacy, viz. unsure if self-sample was done correctly, is the main concern. This was followed by cost and possible trauma/lacerations. Doubts included reliability and side effects. The overall acceptability among the women in the study was 50% would accept versus its quite difficult; will take some time.

Thus, the exploratory study revealed the potential for acceptability of self-sampling. It is poignant that self-sampling is perceived more acceptable than Pap smear for the exact reasons the latter has been found lacking. Self-sampling could thus encourage participation in screening programs among women who reject Pap smear test. However, concerns about self efficacy, cost, and evidence-based reliability must be addressed. Future feasibility studies and interventions to increase cervical cancer screening coverage should build-on these key findings.
Challenges In Handling Pregnant Adolescents Within An Urban Area In Malaysia. General Practitioners' Perspectives

KA Malek
KA Malek; S Abdul-Razak; Sajaratulnisah Othman; Hasliza Abu Hassan
Primary Care Medicine Discipline Universiti Teknologi MARA, Department of Primary Care Medicine University Malaya, Malaysia; Primart Care Department National Defense University of Malaysia Malaysia melkay03@gmail.com

In some part of the South East-Asia, adolescent pregnancy remains a hidden issue that few wants to talk about. Within some culture, this issue is uncomfortable for the community and family to deal with openly. General practitioners commonly work within a community and are easily accessible for pregnant adolescents to come and seek help from. However, handling and addressing issues related to adolescent pregnancy within this culturally and religiously sensitive community may pose a great challenge to the general practitioners.

This is a qualitative study exploring the experiences and challenges general practitioners faced while handling cases of adolescent pregnancy

We used purposive sampling to recruit general practitioners who have had experience managing adolescent pregnancy. From one general practitioner, we snowballed, which led us to more general practitioners who had handled adolescent pregnancy. Each potential participant was called and the nature of research and consent were conveyed and obtained by the research assistant (AA). A convenient meeting time and date were arranged for each participant. The author, KAM and the research assistant, AA visited the clinics to conduct the interviews. Nineteen in-depth interviews were conducted among the general practitioners between December 2015 and March 2015. Each interview lasted between 30 to 45 minutes. The topic guide for the discussion includes exploration of past experiences in dealing with adolescent pregnancy. We then asked the challenges general practitioners encountered in each case management. Following each interview, the record was fully transcribed and translated verbatim. Data were organized into codes and were collapsed into categories and further collapsed in themes. The researchers (KAM, SAR and SO) met up several time to decide on quotes that best describe the codes and categories. Discussions on analysis and interpretations were actively done and any discrepancies were clarified. Corrections were done after each meeting and presented again in another meeting for consensus agreement. Three meetings were conducted to come to a group agreement on the codes, categories and themes. Data was saturated at the 17th in-depth interview. Two more in-depth interviews were conducted following this and no new theme emerged

Three themes emerged to describe the challenges faced by general practitioners; 1) dealing with the pregnancy presentations, 2) culture and religious influences and 3) local practice delivery. Within the pregnancy presentations, involvement of parents, family and partner and handling adolescents characters are the most common and challenging matters. General practitioners also indicated how intricately they have to handle the culture and religious influences which frequently relate to stigma on adolescent pregnancy and parenting, stigma to services related to adolescent pregnancy and
religious belief; and their personal management approach. Among the local practice delivery, general practitioners discussed the current deficiencies in the management strategies and the overall healthcare system. This includes the deficit of culturally sensitive referral strategies and guidelines, preventive measures which include effective sex educations as well as support in handling legal issues and collaboration between the non-governmental and governmental bodies.

In handling cases related to adolescent pregnancy within this culturally and religious sensitive community, general practitioners faced many challenges. These findings can inform specific approaches in planning and implementing culturally appropriate interventions in managing adolescent pregnancy that are of most importance to this population group.
Challenges To The Implementation Of The Integrated Management Of Childhood Illness (IMCI) At Community Health Centres In West Java Province, Indonesia

Christiana Rialine Titaley
Christiana Rialine Titaley; Hafizah Jusril; Iwan Ariawan; Nugroho Soeharno; Tini Setiawan; Martin W Weber
Center for Health Research Universitas Indonesia
Indonesia
christiana_rialine@yahoo.com

The World Health Organization (WHO) developed a comprehensive approach to providing quality care to sick children, called the integrated management of childhood illness (IMCI) in 1994. In line with the government's efforts to reduce mortality rates among infants and children aged under 5 years, the Ministry of Health, Republic of Indonesia, adapted the IMCI guidelines in 1996. The Center for Health Research, Universitas Indonesia (CHR-UI) in collaboration with the Ministry of Health and WHO Indonesia, conducted an operational research on IMCI in 10 districts in West Java Province. A quantitative and qualitative studies were conducted as part of the operational research to explore the implementation of IMCI at the puskesmas level.

This study aims to provide an overview of IMCI implementation at community health centres (puskesmas) in West Java province, Indonesia.

Data were derived from a cross-sectional study conducted in 10 districts of West Java province, in November to December 2012. Semi-structured interviews were used to obtain information from staff at 80 puskesmas, including the heads (80 informants), pharmacy staff (79 informants) and midwives/nurses trained in IMCI (148 informants), using semi-structured interviews.

Information was collected by 20 observers, who were experienced IMCI facilitators. They were recruited based on several criteria, including that they had been IMCI facilitators for at least 2 years and were willing to work in the field outside their working or residential areas. Observers were responsible for assessing the skills of health providers when providing IMCI services, and for conducting interviews using semi structured questionnaires.

We conducted observations and interviews at the puskesmas. A semi-structured questionnaire was used to interview the heads of puskesmas, to collect information concerning the implementation of IMCI at puskesmas level. A separate semi-structured questionnaire was used to interview midwives or nurses, to collect information about their perceptions regarding IMCI implementation at puskesmas level. Additional information regarding the availability of drugs, vaccines and supporting facilities and infrastructure was taken from a third questionnaire, used to obtain information from pharmacy staff.

Quantitative data were analyzed using simple frequency tabulations, whereas qualitative data from semi-structured questionnaires were analyzed by identifying the themes emerging from the responses provided by informants. Triangulation of data sources was conducted by comparing the
responses provided by health workers, heads of puskesmas and pharmacy staff, for information collected from those informants.

Almost all (N = 79) puskesmas implemented the IMCI strategy; however, only 64% applied it to all visiting children. Furthermore, of the 52 puskesmas that had implemented IMCI for more than 6 months, 16 (31%) did not apply it to all visiting children. Several barriers to IMCI implementation were identified, including shortage of health workers trained in IMCI (only 43% of puskesmas had all health workers in the child care unit trained in IMCI and 40% of puskesmas conducted on-the-job training). Only 19% of puskesmas had all the essential drugs and equipment for IMCI. Nearly all health workers acknowledged the importance of IMCI in their routine services and very few did not perceive its benefits. Lack of supervision from district health office staff and low community awareness regarding the importance of IMCI were reported. Complaints received from patients families were generally related to the long duration of treatment and no administration of medication after physical examination.

Our findings showed that creating local regulations supporting IMCI implementation at provincial and district levels, as well as the inclusion of IMCI in the minimum maternal and child care services is important to encourage health professionals to apply the IMCI strategy. It is also essential to identify potential sources of funding in puskesmas for procurement of equipment to support IMCI. Moreover, strengthening of monitoring systems and regular supervision from the district health office is important to ensure a continuous supply of IMCI drugs. As IMCI training organized by the Ministry of Health was not designed to train all health workers, on-the-job training is an alternative to increase the number of workers trained in IMCI. Nevertheless, this study found that on-the-job training for IMCI was not conducted at most of the puskesmas. Thereby, establishing a reward system for health workers conducting on-the-job training might help to encourage implementation in puskesmas.

Community awareness of the importance of IMCI is one of the main pillars of IMCI implementation. Increasing community awareness through the counselling sessions during health visits is important to prevent and reduce misconceptions among families or caregivers. Another way to increase community awareness is to conduct promotional activities. Collaboration with the health promotion unit to develop knowledge, information and education materials such as posters or leaflets is beneficial to improve awareness of the importance of IMCI in the general community.

This study provides insights into the implementation of IMCI in West Java Province. The findings could be used by program managers to improve the implementation of IMCI both in West Java province, and are also likely to be useful elsewhere in the country.

*) The full manuscript of this abstract has been published in the WHO Southeast Asia Journal of Public Health, 2014; 3(2):161-170.
Characteristics, Knowledge, Attitude And Behavior Students Against Smoking Habit In Elementary School District Of Sukoharjo

Titik Haryanti
Titik Haryanti; Wartini
Faculty of public health university Veteran Bangun Nusantara Sukoharjo Indonesia
haryanti.titik@gmail.com

In line with the development and progress of development in Indonesia, on the other hand raised social issues related to health problems include smoking habits early on. This phenomenon is interesting enough to be viewed as a public health problem

The purpose of this study was to determine the relationship between respondent characteristics, environmental characteristics, and behavior towards smoking in junior high school state in District Sukoharjo Indonesia

This is a descriptive study with cross sectional approach. The study population was all students in grade 1, 2, and 3 junior high school state District of Sukoharjo Indonesia are still registered at the time this study was conducted in the amount of 5276 students. Samples were taken by using proportional manner, is by 372 students. The analysis used is multiple linear regression with $\alpha = 0.05$.

From the study it can be concluded that most of the characteristics of the respondents were male, parents work with the education of the respondents are self-employed respondents are parents graduated from high school. Most of the respondents were smokers environment both within the family and outside the family and the majority of respondents who smoke near the neighborhood of respondents were 1-5 times / day. Behavior of respondents to smoking habits in mind that 41.4% of respondents admitted to smoking. The age of first smoking respondents mostly 5-12 years (62.3%) on the grounds of smoking want to try (70.1%). Of respondents who smoked at 44.2% smoked more with much less reason for the quieter times of stress and sour taste in the mouth (30.9%). The number of cigarettes smoked mostly 1-5 cigarettes / day (98.5%) and the selected time when smoking is when playing with friends (73.5%). The reason respondents do not smoke anymore / try smoking is because smoking can cause coughing / shortness (71.5%). From the results of chi-square test known that characteristics and attitudes of respondents to smoking-related significantly to the habit of smoking. Test multivariate linear regression is known that sex and frequency of smoke near the respondents jointly significantly related to smoking in adolescents.
Clearing The Water : A Review Of The Effectiveness Wastewater Treatment Plant Models On Hospital

Pitriani
Pitriani; Lusia Salmawati; Hermiyanti
Tadulako University
Indonesia
pitrionarifin@yahoo.co.id

Total amount of waste generated by health care activities, about 80% is general waste, comparable to domestic water. The remaining 20% is considered hazardous material that may be infectious, toxic, pathogenic agents, radioactive and cytostatic agent. While the result of Rapid Assessment Directorate of Water Suplly and Sanitation The Ministry of Health, which state that of 2.428 hospital in Indonesia only 49% have Wasterwater Treatment Plant (WTP) and the number of those that meet the water quality standard of hospital waste is only 25% after treatment. Various types of wastewater treatment has been applied, but the biological systems is a best alternative treatment. There are several of biological treatment methods with different a level of efficiency, and each has advantages and disadvantages. Problems are repeatedly encountered in the WTP is limited funding to establish and high operational costs the facilities, particularly for small and medium hospitals.

The literature review purpose to assess the comparison of various models of biological treatment in order to get appropriate processing model for each type of hospitals, They weigh the advantages and disadvantages of each model covering design, land, requirement, efficiency, operating costs and maintenance.

The author conducted a scientific study all available litrature published over the last twenty years (1992-2015). Our main goal is to determine the Wastewater Treatment Plant models appropriate to each type of hospital. The Wastewater Treatment Plant models used are classified in three types Main, Namely: Suspended type of culture, attched type of culture and the type of langoon. Our secondary goal is to describe the advantages and disadvantages of each method covers the design, land, efficiency, operating costs and maintaenance. Article been agreed upon by the author based on relevance to the title of this article. After analysis of available data, this paper concludes with recomendations for hospitals and related institutions in the determine wastewater treatment is approriate for them applied and also mentioned the health benefits both individuals and publich when this carried out based on the available scientific evidence.

The literature demonstrating, biological treatment system effective to reduce TSS, BOD5, COD and TC value which fulfilled the threshold value. Of the several methods of biological treatment, biofilter system is regarded as the most excellent treatment method, because the land requirement is not extensive, and also a low energy requirement thus reduce operating costs, although it need a comprehensive maintenance. While the activated sludge systems require extensive land. RBC and aerator system requires a large energy thereby increasing operational costs. The last a few years carried out various studies to improve the efficiency of the biofilter system, recent research found modification a treatment such as addition of Effective Microorganism 4 (EM4) five percent (5%) was able to accelerate formation and maturation of biofilms thus the efficiency of biofilters be increases.
in terms of time needed. It is possible this method would be suitable to be applied on activated sludge, rotating biological contactor, and aerator system. Likewise, the combination of anaerobic and aerobic system is expected to improve the efficiency of wastewater treatment, especially in nutrient removal and reduce the number of sludge produced. Whereas inorganic chemical parameters such as MBAs and heavy metals, it is rare studies to explore specifically, limited literature makes it difficult to determine the level of removal efficiency. Needed more depth studies on this point. One of the reasons the hospital wastewater that has been processed using WTP not meet the standards, due almost all hospitals in Indonesia have yet to implement a separate duct systems. Ideally is separated line between the black water, emulsion water, gray water and clean water as it has distinct characteristics. This separation is important because as the basis to determine appropriate type of preliminary processing before continuing with the WTP. Distinct of wastewater characteristics required pretreatment differently. This important to note due to the affect the effectiveness of further treatment. Apart from those problems, which is an important parameter in the biological treatment is the pH value and temperature. Shifting of the from the normal limits of these parameters will greatly influence the growth of microorganisms that act as decomposers agent wastewater pollutants. Some literature mentions the pH value in media affects enzymes and transport processes in cell membranes. Protein structure will change when the pH value in the media shifted, and so does the temperature, of each increased 5-10% over the optimum temperature can lead to the lysis and death of microorganisms. This index also plays a significant role in biological processes of wastewater treatment.
Clustering Of Lifestyle Risk Factors Among Adult People With Metabolic Syndrome In South Korea

Yohan Lee
Yohan Lee; Dong-Woo Kim
Department of Preventive Medicine, Korea University College of Medicine
South Korea
vionic@korea.ac.kr

Metabolic syndrome is clustering of multiple cardio-metabolic risk factors and pre-morbid state of cardiovascular disease and diabetes mellitus. Addressing metabolic syndrome effectively can be important strategy for reducing disease burden of chronic disease. The first approach for the problem is to develop an effective intervention program for lifestyle change. However, information or knowledge of how the lifestyle risk factors are patterned and distributed among people with metabolic syndrome is very limited. We investigate the clustering pattern of four major lifestyle risk factors - smoking, heavy drinking, physical inactivity, and excessive consumption of fat or salt - among people with metabolic syndrome in South Korea.

A total 2,928 subjects with metabolic syndrome were extracted from dataset of the 5th Korea National Health and Nutrition Examination Survey which is a nation-representative health survey of South Korea. The NCEP-ATP III criterion for defining metabolic syndrome was applied. Four lifestyle risk factors such as smoking, heavy drinking, physical inactivity, and excessive consumption of fat or salt, and social factors such as income, education level and job state were used for analysis. The analyses in this study consisted of three parts. First, the observed/expected ratio (O/E ratio) was calculated. Clustering exists when the observed prevalence of a certain combination of lifestyle risk factors exceeds the expected prevalence of the combination. Second, The associations between sets of two lifestyle risk factors were examined by calculating the prevalence odds ratios (POR) and statistically tested by Chi-square tests. Third, this study examined the social variation in the clustering of the lifestyle risk factors by using ordered logistic regression analysis.

In men, about 45% of the study subjects smoked, 44% drank heavily, 46% ate excessive fat or salt, and 54% had a lack of physical activity. Women have high level of physical inactivity (57.3%). 11% of male subjects had no lifestyle risk factor, 26% had one, and 37% had two lifestyle risk factors. 26% had three or more lifestyle risk factors. Meanwhile, more than 80% of female subjects had nothing or only one risk factor. Clustering was found at both ends of the lifestyle spectrum. The observed prevalence of having no and having all four lifestyle risk factors was higher than could have been expected on the basis of the individual probabilities of the four risk factors alone. The prevalence of specific combinations such as smoking+heavy drinking+excessive intake of fat or salt was higher than could have been expected. The prevalence odds ratios (POR) of combinations of smoking/heavy drinking and heavy drinking/excessive intake of fat or salt were high. It suggests smoking and heavy drinking are clustered. And heavy drinking and excessive intake of fat or salt are clustered. In other words, people who smoke are more likely to drink heavily and intake excessive fat or salt. The overall pattern of clustering was similar for men and women. Multiple risk factors were more prevalent among men and low educated people. Education has positive effect on reducing number...
of having lifestyle risk factors. Subjects educated above high school have lower possibility of having three or four risk factors than subjects with primary or middle school education. Information on clustering of multiple risk factors among people with metabolic syndrome provides support for developing an effective multiple-behavior intervention for them.
Coastal Cities At Risk: Health And Climate Change Adaptation City Resilience Simulator Development

Uma Langkulsen

Uma Langkulsen; Desire Tarwireyi Rwodzi
School of Global Studies, Thammasat University, Pathumthani, Thailand
Thailand
uma.langkulsen@sgs.tu.ac.th

There are essential public health emergency resources that need to be taken into consideration when planning for the resilience of coastal cities to climate related hazards. As part of the health component for the collaborative study leading to the development of a City Resilience Simulator for floods and other climate hazards in Bangkok Metropolitan Administration and its peripheries, we assessed the adequacy of essential public health emergency resources.

To assess and compare the distribution of public health emergency resources across surveyed agencies/organizations. We sampled 6 and 14 hospital and non-hospital agencies/organizations, respectively. In-depth interviews were conducted using a structured questionnaire to gather information on the availability of public health and public health emergency resources. A descriptive analysis was then conducted to assess and compare the distribution of public health emergency resources across surveyed agencies/organizations. Enormous differences as well as similarities were observed between and within surveyed hospital and non-hospital organizations.

Overall, hospitals were better resourced compared to non-hospital organizations. A striking observation was the non-availability of emergency preparedness plans that included standard operational procedures at all surveyed hospitals, and at most of the non-hospital agencies. Almost all of the non-hospital agencies outside of the Ministry of Public Health lacked early warning and surveillance systems for public health. With the exception of Sam Kho, a district level hospital that lacked most of the public health emergency resources, all other surveyed hospital and non-hospital agencies had policy frameworks for emergency preparedness and response in place. In conclusion, the majority of non-hospital agencies/organizations as well as some hospitals, particularly at district level, might not be adequately resourced and prepared to meet the public health demands of their catchment areas in the event of flooding or other climate change related emergency.
Collaborative Action On Empowering Community For Waste Management: Experience Of Public Health Student Of Airlangga University In Implementing Health Promotion In East Java Province, Indonesia.

Alya Hazfiarini
Alya Hazfiarini; Ika Prastiani; Kuuni Ulfah Nila Elmuna; Ratri Wira Sari
Public Health Faculty Airlangga University
Indonesia
alyahazfiarini21@yahoo.com

Community action is one of principles that addressing in Ottawa Charter for conducting health promotion. Holding this principle, the students of Public Health Airlangga University conducted a multi years health promotion project that aimed to improve healthy life at the village of Samir Plapan, Gresik District, East Java Province. This village is an agricultural areas with typical rural health behaviours. People throw their garbages every where and there is no certain point of collecting household waste. Therefore, the village is designed as Desa Binaan, which is a multi years of health promotion project of Public Health Faculty of Airlangga University.

The project has long term objectives, which is improving health condition of people at Samir village through education, economic and environment health program. The goal of the project at its first year is to establish household waste management which is called waste bank™ and become the focus of this writing.

The health promotion project had been conducted by using action research in which a process of inquiry was conducted by and for those taking the action. The primary reason for engaging in action research is to assist the target in improving and/or refining his or her actions. Thus, first year of Desa Binaan project began by seeing the reality as possibilities and potential through conducting appreciative inquiries on what owned by the villagers and what possibilities to be done for gaining healthier life in the context managing household waste.

Series of meetings, focus groups discussions, and trainings were conducted with member of Family Welfare Movement (Pembinaan Kesejahteraan Keluarga) and member of Youth Organization (Karang Taruna) that involving 75 people at the village. This health promotion action delivered together with the district and village government, Environmental Agency (Badan Lingkungan Hidup/BLH) and supported by Rumah Zakat, PT Petrokimia Gresik, PT Petro Jordan, PT AJG and the Public Health Faculty of Airlangga University.

The results of the health promotion project for the first year were the village women collectively establishing what called Waste bank™. This is as like a regular commercial bank, in which, each household open an account at their owned waste bank. Instead of save some moneys, each household, periodically, deposit their inorganic solid waste to the bank. The waste is weighted and priced, based on market price. An income from depositing the garbage then saved at their account and it could be withdraw anytime. Moreover, the organic waste are treated as an organic fertilizer using method called takakura. The organic fertilizer then are used for the plants in their yard/garden.
and this has decreased their expenditures to buy fertilizer. This waste management project has significantly clean up their village from scrap heap at every corner of the village.

Furthermore, this health promotion action project with intensive facilitation has brought valuable insight learning experiences for student despite their juggling with their campus learning time and means of transportation to the village from their campus, as the project site is about 1 hour drive from their campus. The student has valuable learning on organizing multi stakeholders and worked with cross-sectors. The student found that collaborative action enriched the health promotion action in which behavior change and engagement occurred from each stakeholders collectively according to each roles and responsibilities. Despite having valuable learning process in working with community, another lesson drawn from this project by the student that their involvement should be well prepared and equipped with specific knowledge and skills on working with community and technical aspects of the action itself.

For the village women and the youths, the project is not only increasing their knowledge and skills on waste management but also improving their health and incomes. They highly participated as the action met their needs and change was emerged from strength based approach in which local experiences and locally available resources was counted. Additional noted from conducting this kind of project is the action programs need to be designed and recorded systematically so that the next round of the student groups ease to follow up what had been done by the previous round groups of student, as the project site is multi years health promotion action project of the Airlangga University.
Community Health Level Indicators In North Sumatera Province In 2013

Erna Mutiara
Erna Mutiara; Desi Ratna Sari; Arnita
Faculty of Public Health University of Sumatera Utara
Indonesia
erna_mutiara@yahoo.com

Health level indicator is a scale that can measure the healthy or unhealthy condition of the function and structure of the physical, mental, and social of a person. Community health level indicators can be measured by computing the morbidity, mortality, disability, fatalities and life expectancy. This research was conducted to clusterize 33 districts/cities in North Sumatera Province based on 8 indicators (infant mortality rate, underfive mortality rate, maternal mortality rate, prevalence of diarrhea, prevalence of pneumonia, prevalence of TB, low of birthweight, and prevalence of malnutrition) that will describe the health level of the community.

This research is a descriptive study. The population and sample of this research were all data of 8 indicators of 33 districts/cities noted in North Sumatera Provincial Health Office in 2013. All of data were analyzed using cluster analysis. Method used in this research is the method of hierarchy and distance measurement between clusters using Average Linkage, which is an average of all distances.

The results of the cluster analysis indicated that there were 3 clusters of districts/cities based on 8 indicators that described the health level. First cluster consisted of districts/cities of Nias, Mandailing Natal, Tapanuli Selatan, Tapanuli Tengah, Tapanuli Utara, Toba Samosir, Labuhan Batu, Asahan, Simalungun, Dairi, Karo, Deli Serdang, Langkat, Nias Selatan, Humbang Hasudutan, Pakpak Bharat, Samosir, Serdang Bedagai, Batu Bara, Padang Lawas, Padang Lawas Utara, Labuhan Batu Selatan, Labuhan Batu Utara, Nias Utara, Sibolga, Pematang Siantar, Tebing Tinggi, Medan, Binjai, Padang Sidempuan and Gunung Sitoli. Second cluster consisted of district of Nias Barat, while third cluster consisted of city of Tanjung Balai.

It can be concluded that North Sumatera Province has a good health level based on result of the cluster analysis. Out of 33 districts/cities there were 31 districts/cities which formed one cluster with good health level.
Community Participation In Case Detection Management Of Malaria: Evaluation Of The Village Malaria Volunteer In Kokap Sub-District Of Kulonprogo District, Yogyakarta Province, Indonesia, Year 2013

Merlyn Sinaga

FETP UNIVERSITAS GADJAH MADA
Indonesia
sinaga.merlyn@gmail.com

Kokap is one of the sub-districts in Kulonprogo district. Incidence of malaria in Kokap is still fluctuating in the last 5 years. Early detection of cases and treatment by Village Malaria Volunteer (JMD) is necessary to break the chain transmission.

This evaluation aims to evaluate aspects of inputs, processes, outputs and outcomes case detection and management of malaria.

This is a descriptive observational study. Interviewing technique is used for collecting primary data from JMD and programmer malaria at two health center office in Kokap. Secondary data is collected of document reports.

There were 15 JMD that have been trained on case detection and treatment of malaria. Process: the average coverage of house visit per month was 38.17%, JMD took 90.54% of all blood slides and identified 52.50% of malaria cases, the slide positive rate (SPR) of blood slides taken by JMD was 0.98%, majority of positive blood slides (65.00%) were examined on the same date with taking blood slides and minority in 3 days later (2.50%), the proportion of plasmodium formed gametes was 15%, cases treated with artemisinin combination therapy (ACT), and follow-up treatment showed first and second follow up was done of >90% of cases and third follow-up of 70.3% of vivax parasite. Output: there wasn't high case incidence (HCI) village and mortality, there were two villages moderate case incidence and three low case incidence (LCI) villages and annual blood examination rate (ABER) in 1 MCI villages was >10% and 4 other villages were <10%. Outcome: the average of Annual Parasite Incidence was 1.14 (CFR=0%).

The detection case is still not good enough because lack of house visit and high of proportion of plasmodium formed gametes. The case management is good enough because no cases of relapse. The number of JMD in MCI village should be added so every house can be visited at least one times a month.
Comparison Of Household Food Security, Energy And Protein Intake Among Independent And Dependent Elderly Households

Dini Ririn Andrias
Dini Ririn Andrias
Universitas Airlangga, Surabaya, Indonesia
Indonesia
dien_ra@yahoo.com

Elderly is one of vulnerable groups to health and nutrition problems. Aging process causes decline in physical and physiological capacity hence more vulnerable to disease. This condition worsened by their vulnerability to reduced capacity on fulfilling food needs due to decline in productivity and decline in mental health, mainly when the elderly living independently.

This study was aimed to compare household food security, energy and protein intake of independent and dependent elderly living in home.

This cross sectional study was conducted in 2013, involving 104 randomly selected elderly from two sub districts in Surabaya, Indonesia. Dependent elderly was defined as elderly who live with other productive family/relatives and get assistance from them, whereas, independent elderly was defined as elderly who live independently at home. Household food security was assessed by using short version of US-HFSSM. Energy and protein intake was obtained from dietary data which were collected by using single 24 hours recall method. Energy and protein intake were calculated by using Nutrisurvey, and compared to the Indonesian Recommended Daily Allowance (RDA). Energy and protein intake were classified as adequate if fulfill more than 90% RDA, mild deficient if fulfill 70-90% RDA and severe deficient if fulfill less than 70% RDA.

Results of this study showed that overall, 23.1% households were food insecure. When disaggregated into living-dependency status, more food insecure households were found among independent elderly households (31.8% compared to 16.7%), however this difference was not statistically significant. Protein adequacy was not statistically significant either, however the percentage of independent elderly with severe deficient of protein was higher (70.5%) compared to among dependent elderly (61.7%). Significant different was found in energy adequacy, in which among independent elderly group 84.1% were severe energy deficient, whereas among dependent elderly group 61.7% were severe energy deficient. This study did not analyze factors influence energy and protein intake, however, different in energy intake might be influenced by economic capacity, since household expenditure indicator and economic access to food were significantly better among dependent elderly households. Other factors, such as social and physical support for food accessibility might also contribute, however, this study did not collect data on those indicators.
Completeness Of Medical Records In The Medika Hospital, Bumi Serpong Damai, South Of Tangerang, Banten Province 2014

Dieta Nurrika
Cicik Yuninti ; Dieta Nurrika ; Susi Shorayasari ; Agus Purwanto
Sekolah Tinggi Ilmu Kesehatan Banten
Indonesia
dieta_n@yahoo.com

Hospitals have an obligation to regulate medical records. Medical records containing the identity of the patients, examination, treatment and other services that have been given to the patient. Usability of medical record can be seen from several aspects such as administration, medical aspects, legal aspects, financial aspects, research aspects, educational aspects and aspects of documentation.

Completeness of medical records extremely important, when the contents of the medical record is not complete, the usefulness of the medical records could not be fulfilled. Based on the minimum service standards, completeness of medical records should be reach 100% maximum of 24 hours after the completion of services.

The purpose of the study was to determine the completeness of the medical records in four polyclinics (i.e. internal medicine clinic, child clinic, surgical clinic, obstetrics and gynecology clinic) in Medika hospital.

This research was cross sectional study, using the secondary data, originating of the medical records in Medika hospital. The population of study was the entire medical records of patients in the four of polyclinics (i.e. clinic medicine, child clinic, a surgical clinic and obstetrics clinic) in Medika hospital. A Checklist sheet used to collect the necessary data.

The results showed, in the Medika hospital complete medical records of 32.5%, and the incomplete medical records of 67.5%. The highest average complete medical record is a child polyclinic reached 0.60 with a standard deviation of 0.498, while the lowest average is surgical clinic. The average completeness of medical records at the clinic internal medicine and the gynecology and the obstetrics of 0.50 and the 0.20, respectively, with a standard deviation of 0.509 and the 0.407. We conclude that the completeness of medical records in the hospital Medika remains low.
Core Competencies For Public Health Professionals In Primary Healthcare Facility

Nuzulul Kusuma Putri  
Nyoman Anita Damayanti; Nuzulul Kusuma Putri; Ratna Dwi Wulandari  
Universitas Airlangga  
Indonesia  
putri.nuzulul@gmail.com

A workgroup formed in September 2007 to begin refining and updating the core competencies of public health professionals in America. The core competencies then applied in designing curricula in many public health schools in Indonesia. Unfortunately, some core competencies are possible not to suit with the condition in Indonesia.

Therefore this study aimed to investigate what kind of core competencies for public health professionals in primary healthcare facility.

This is a descriptive study with retrospective design applied. There were 18 public health bachelors worked in Public Health Center and 20 others worked in district health office participated.

The result showed that public health bachelor has specific competence in their working area. Based on this study, public health bachelor working in public health centers need empowering competence more than one who work in district health office. Meanwhile, bachelor working in district health office need competency in public speaking. Both in public health centers and management office graded by their working supervisor were excellent in data analysis. Data analysis competencies became the fingerprint of public health bachelor. Public Health School should consider all of identified competencies in its curricula to guarantee that the job demand suit with the feature of public health bachelor.
Correlation Between Tuberculosis Infection And Clean And Healthy Living Behavior In Bandung City

Ryan Rachmad Nugraha
*Ryan Rachmad Nugraha; Ardini Raksanagara*
Universitas Padjajaran
Indonesia
ryan.rachmad.nugraha@gmail.com

Tuberculosis has been becoming threats to Indonesian health with approximately 640,001 new cases which turns Indonesia into 4th most Tuberculosis cases. Tuberculosis can be controlled started with behavioral modification in the smallest community which is household setting. The health promotion effort is known as PHBS (Perilaku Hidup Bersih dan Sehat/Clean and Health Living Behavior). PHBS has a wide targets divided into primary, secondary, and tertiary stages; starting from an individual as a part of community to a specific group and policy makers. In the practice, Clean and Healthy Living Behavior can be used as a reference in order to modify community behavior and to prevent the spread of both communicable and non-communicable diseases.

The goal of the study is to determine the correlation between the number of Clean and Healthy Living Behavior in the household setting and the incidence of Tuberculosis.

The study design used in this study is a cross-sectional with retrospective study. To answer the research question, various data is gathered from Bandung Health Profile from 2009-2014 and used properly.

The variables measured were: 1) The independent variable, which is the percentage of Clean and Healthy Living Behavior applied in the household setting in Bandung City. The data was gathered from all Primary Health Centre and was reported to the District Health Office. 2) The dependent variable, which is the incidence of Tuberculosis in Bandung City.

The data was collected from patients seeking treatment to Primary Health Centers in Bandung City. The Tuberculosis incidence was measured by the amount of patients coming to Community Health Centers divided by total person at risk.

The data was derived from all districts and health facilities in Bandung city and had been reported to Bandung District Health Office annually. The correlation between the independent and dependent variable was analyzed using SPSS software with parametric correlation with Pearson analysis.

There are 30 districts as the study sites and are divided into 4 categories of research areas. From every district obtained measurement results regarding household clean and healthy living behavior based on 10 indicators of clean and healthy living behavior in order households conducted by health workers in health centers.

Based on the evaluation in 30 districts in Bandung city, the average indicator of Clean and Healthy Living Behavior (PHBS) at household setting is 65.75% (range 53.71 to 65.76; SD = 6.95), while the incidence of Tuberculosis is 10.53% (range 9.91 to 11.66; SD = 0.89).
From the coefficient correlation computation using SPSS software, it is found that PHBS is strongly associated with the incidence of Tuberculosis ($r=-0.94$). The relationship between two variables is negatively associated, meaning as the number of PHBS increases, the number of Tuberculosis incidence will decline.

The data analysis showed that there is negative correlation between Clean and Healthy Living Behavior and the incidence of Tuberculosis, suggesting that as the implementation of Clean and Healthy Living Behavior gets increased, the incidence of Tuberculosis becomes lower. It can be explained that when the household implements the Clean and Healthy Living Behavior; especially activities such as washing hands with clean water and soap, eat vegetables and fruits, and to stop smoking inside the house, which will prevent the spread of Tuberculosis transmission.

There are 10 indicators of Clean and Healthy Living Behavior, and several points are linked with Tuberculosis transmission either directly or not directly. To stop smoking inside the house, is directly linked with Tuberculosis transmission; while there are several indicators that are not directly linked, such as: 1) to wash hands using clean water and soap, and 2) eat fruits and vegetables every day.

The results showed that in Bandung city the implementation of Clean and Healthy Living Behavior is associated with the incidence of Tuberculosis in the household. The greater implementation of Clean and Healthy Living Behavior in a household, the lower incidence of Tuberculosis will be.

The result of the study can be used by health policy maker and also health practitioner in Bandung city to ensure Clean and Healthy Living Behavior as a determinant of health and should be applied as an infection control policy and mitigation.
Correlation Food Consumption And Fat Mass Percentage With Adolesence Athlete's Performance

Sri Adiningsih
*Muhammad Mukhdor Al Faru : Sri Adiningsih*
FKM UNAIR
INDONESIA
sadiningsih@yahoo.com

Teenagers had higher activity rate compare with other age, so need higher nutrient which their growth and support their sport activity. Swimming athletes are required to have good body proportion for maximum performance.

The aim of this research is to analyzer correlation between consumption pattern and body fat with the performance of swimming teenager athletes in swimming Club. The aim of this research is to analyzer correlation between consumption pattern and body fat with the performance of swimming teenager athletes in swimming Club.

This research was observational analytic cross-sectional study design. which number samples of 23 from swimming athletes who minimum age of 10 years, and having minimum one regency-stage competition attended. The data collected by interview, include characteristics, knowledge, eating habit, consumption pattern by Food Frequency questionnaire, mean intake energy and macro nutrient by 24 hours Recall, measured body fat used Bioelectrical Impedance Analysis, and measured the performance by Critical Swim Speed Test.

Result found that there was no relation between the consumption pattern of energy, carbohydrates, protein, fat, and water with the performance of the athletes. There was relation between body fat percentage with the performance for female athletes, but no relation for male athletes.

So conclude that the performance of swimming athletes is not only affected by nutrition intake, but also by other factors. Sugestion to have the maximum performance, a swimming athlete has to carefully paying attention to all related factors.

Result found that there was no relation between the consumption pattern of energy, carbohydrates, protein, fat, and water with the performance of the athletes. There was relation between body fat percentage with the performance for female athletes, but no relation for male athletes.

So conclude that the performance of swimming athletes is not only affected by nutrition intake, but also by other factors. Sugestion to have the maximum performance, a swimming athlete has to carefully paying attention to all related factors.
Correlation Having Mother Child Health (MCH) Handbook, Coverage K4 And Delivery In Indonesia

Erlin Helinda
Erlin Helinda; Surahman A
Faculty of Public Health, Universitas Indonesia
Indonesia
erlinh72@gmail.com

The effort to increase mother child safety during pregnancy is first care pregnancy (K1) and completely care (K4), and delivery in health care facility. Mother Child Health (MCH) Handbook intervention is used to increased knowledge and family practice in mother child health maintenance, mother child health accesbility, conselling information education in pregnant delivery plan, indentify complication.

The used of MCH handbook in 2013 is not maximal (31.7%), it is increasing in 2010. Antenatal coverage (K4= 84%) decreased to 6.2% and coverage of delivery decrease to 11.6%. Knowing correlation changes of having Mother child Health (MCH) Handbook with K4 and delivery used provincial Riskesdas data in 2010 and 2013. cross Sectional Design with correlation test having Mother child Health handbook with K4 and delivery

The changes coverage of having Mother Child Health handbook mean 5.95,  K4 mean 6.9%, and delivery mean -15.8%. Correlation having Mother Child Health handbook has strong correlation $r = 0.46$ ($r^2 = 21.1\%$), and significant p-value = 0.007. and the correlation delivery has weak $r = 0.063$ ($r^2 = 0.04\%$), not significant p-value = 0.727.

Mother Child Health handbook increased and improve qualified mother child health management system since pregnancy until 5 years of child. there is strong corellation oh Mother child health Handbook and complete antenatal care (K4). In contras, there is no corellation with delivery. It sis explained that Mother Child Health Handbook is supporting to K4, but quality is not maximal yet in delivery planning. There is strong corellation between having Mother Child health (MCH) handbook with K4, but not corellation with delivery coverage
Correlation Of Working Satisfactory With Working Performance Of Health Workers In Rancaekek Health Center

Dave Orlando Gumay; Titik Respati
*Dave Orlando Gumay; Titik Respati; Endang Noor F.*
FK UNISBA, Rancaekek Helath Center
Indonesia
ph.fkunisba@gmail.com

Puskesmas or Community Health Center is the gate keeper for basic health services. Health Center served as the frontline for primary care, promotion and prevention service providers and referral in accordance with the standards of medical care. Puskesmas as technical implementing instituion has to improve the quality of its health workers performance. One of the factors that affected health workers performance is the fulfillment of working satisfactory.

This research aimed to describe the correlation of working satisfactory and working performance in Rancaekek Health Center.

This was an analytic studies with cross sectional approach. Subjects of this research are all health workers in Rancaekek Health Center. Questionnaire about working satisfactory were filled by all health workers and performance assessment questionnaire filled out by the direct supervisor of the respondents and superior performance assessment completed by the Chief of Rancaekek Health Center.

The results showed 36 people or 80% of the respondents less satisfied by psychological, social, physical and financial factor. Based on the job performance assessment, as many as 40 people or 66.7% had poor performance. The results of the statistical calculation using chi-squared showed there was correlation of working satisfactory with working performance(p-value = 0.018, PR=6.000) of health workers in Rancaekek Health Center. To enchance working satisfactory leading to working performance is important to achieve health quality services for the community.
Correlation Of Selected Anthropometric Parameters And Blood Pressure Among Young Women In Reproductive Age

Sri Sumarmi
Sri Sumarmi; Nunik Puspitasari
Faculty of Public Health, Universitas Airlangga
Indonesia
msrisumarmi@gmail.com

Anthropometric parameter as well as body fat, especially abdominal fat had been identified as risk factor of hypertension among adult persons. Subcutaneous fat is the most important indices for body fat, therefore we need to confirmed whether subcutaneous fat and others anthropometric parameter correlated with blood pressure

The objective of this study was to show the correlation of body mass index (BMI), mid upper arm circumference (MUAC), subcutaneous fat and blood pressure among young women in reproductive age.

A cross sectional study was conducted at catchment areas of nine selected Public Health Center in Probolinggo District, East Java. Total of 420 young women in reproductive age (age 20.5 ± 3.6 y) were enrolled in this study. We measured the anthropometric parameter such as body weight and height for calculating body mass index, mid upper arm circumference (MUAC), subcutaneous fat, as well as waist and hip circumference. Blood pressure was assessed for systolic and diastolic blood pressure. Data were statistically analysis by using spearman correlation test.

Body mass index was correlated with both of systolic and diastolic blood pressure, with coefficient correlation of (r = 0.186, p = 0.039) and (r = 0.192, p = 0.033) respectively. Subcutaneous fat of bisept and sub scapula were correlated with systolic blood pressure (r = 0.186, p = 0.039) and (r = 0.203, p = 0.024), respectively. Waist circumference but not hip circumference was correlated with both of systolic and diastolic blood pressure (r = 0.184, p = 0.040) and (r = 0.201, p = 0.025), respectively. There was no correlation between MUC and blood pressure.

Despite of statistical analysis showed weak correlation between some selected anthropometric parameters and blood pressure, but this evidences indicated that body mass index as well as subcutaneous fat may became important risk factors for blood pressure, even among young women.
Equipment for implementation of telemedicine has been quite sufficient for student activities, but to training activities involving the target hospitals still required a set of related software. Decision Support System is needed to run training in easy, simple and fun, so it make effectiveness and efficiency of our computer and smart phone.

To make software in Decision Support System for Hospital Service management so it can be used in the framework of the training on the community and hospital management professional. It was carried out by stages: first assessment, software development, checked tested and fourth assessment, by lecture, students, doctors and programmer.

Creating 8 pies of software to implement for student and hospital management professional, as: In and Out patient, Emergency, Operation service, ICU, Pathological and Clinical Laboratory and Radiology; after that software have got copy right and patent have registered.
Delay In Seeking Care Among Tuberculosis Patients In Lower Myanmar TB Diagnostic Center, Yangon, Myanmar

May Chan Oo
May Chan Oo; Dusit Sujirarat; Charnchudhi Chanyasanha
Mahidol University
Myanmar
maechanoo@gmail.com

Regardless of applying effective chemotherapy and cost effective TB control strategy nowadays, TB control activities are being disturbed by patient delay which increase morbidity, mortality and unnecessary treatment cost in Myanmar, one of the 22 high burden countries.

This study aimed to explore the delay in seeking care, estimate the proportion of patient delay and identify the factors contributing to delay in seeking care among TB patients.

This was a cross sectional study which was carried out on patients' delay in seeking care among TB patients in Lower Myanmar TB Diagnostic Center. About 346 TB patients were interviewed with structured questionnaire which were entered by Epi Data and analysed by SPSS software in this cross sectional study. Descriptive statistics for all variables, Chi-square and logistic regression for the associations were done.

In this study, 18 years old and above patients were participated (Mean ± SD = 43.12 ± 14.56) and male:female is 1.1:1. About 66.8% of TB patients delayed in seeking care and average duration was 21 days. By univariate analysis, some socio-demographic factors, cues to action, knowledge and perception on TB, accessibility and affordability to health facility and first noticed symptoms were statistically significant. By multivariate logistic regression, education such as illiterate or no formal education (OR = 7.31), primary education (OR = 4.93), middle education (OR = 3.89), government staffs in terms of occupation (OR = 5.41), getting information about TB (OR = 2.16) and close person get sick with TB (OR = 2.01) were significant at p-value<0.05.

Weaken health education, community awareness and wrong perception on TB were specific points of patient delay in this study. Information about TB, its prevention and treatment are also still limited. These problems are not superficial and both TB patients and healthy people need to know extensively about TB.

To reduce patient delay, this epidemiological data can be useful for National TB Control Program as crucial intervention in TB control activities to the community. Similar studies in different locations, diagnosis delay, health system delay, total delay in taking treatment and qualitative studies are also needed for further study.
Demographic And Environmental Characteristics Of Dengue Cases In Different Localities In Klang

Yueting Kew

Yueting Kew; Yee Yang Chor; Wan Ting Lim; Xin Ni Cheah; Chin Jun Ling; Darishah Hamzah; Li Ping Wong; Tin Tin Su

University Malaya
Malaysia
yue_ting0214@hotmail.com

Dengue fever is endemic in Malaysia. The district of Klang achieved third highest number of cases and fatalities (4,111 cases, 15 deaths) in Selangor state of first half year in 2015. Aedes sp. are the vectors of dengue virus and they have wide range of breeding sites including natural and artificial containers.

This study was done to determine the number and demographic characteristics of dengue cases in Klang for the past one year based on data from Communicable Disease Centre Information System (CDCIS), eDengue notification system. Secondly, in order to capture the real picture of the studied area, an observational survey was carried out to identify the environmental characteristics difference among localities with different number of dengue cases.

Secondary data on demographic characteristics of dengue cases in Klang for the past one year was obtained from eDengue notification system. Observational survey was done to identify the environmental characteristic difference among selected localities. Localities were divided into tertile groups. First tertile consisted localities with lower number of dengue cases while third tertile consisted localities with higher number of dengue cases. All analysis was conducted using Statistical Package for Social Sciences (SPSS) v. 22.0. The comparison of environmental characteristics between first tertile group and third tertile group was tested using a Chi-square test with a significance level of 0.05.

The proportion of non-Malaysian was higher in third tertile group than in first tertile group (n=101, 8.5% versus n=1, 2.5% p<0.05). Unoccupied houses, multiple rubbish dumping sites and abandoned vehicles were commonly found the surrounding of all localities. Most of the houses (66%) at all localities had flower pots (66%) in the front yard. The presence of garden (n=54, 20.4% versus n=25, 9.5%; p<0.001), grass (n=73, 27.5% versus n=51, 19.5%; p<0.05) and damp soil surface (n=63, 23.8% versus n=15, 5.7%; p<0.001) at the front yard of houses was significant higher in localities from third tertile group compared to first tertile group. Environmental factors play a role in vector control. However, it must be together with human behavioural control in order to eliminate the vector breeding sources effectively.
Demographic Transition And Conditions Of Health To Elderly People In East Java

Rachmah Indawati
Rachmah Indawati
Airlangga University
Indonesia
rachindawati@yahoo.com

Population dynamic changes in East Java has marked the fifth stage of the demographic transition. A long life expectancy will affect the health problem. Linkages demographic transition and health transition is called epidemiologic transition. To understand the epidemiologic transition it is necessary to look at the health transition, especially in the elderly.

To identify the structure of the population and the health conditions of the elderly in East Java.

This study was a 'secondary analysis of data'. And data analysis using descriptive analysis by performing a frequency distribution.

The proportion of elderly who have health complaints is more than 50%. The percentage of women with health complaints larger than the males in all age groups. In general, complaints are experienced fever, cough, runny nose, and headache. East Java experienced with the aging of the population. Proportion of 65+ is more than 7%. Good improvement in life expectancy can threaten health and the emergence of infectious diseases, especially degenerative diseases. East Java is in the second phase and has moved into the third phase of such a stroke in 2007 was 7.7% and in 2013 stroke increased to 16%. In 2007, hypertension was 7.5% and in 2013 the disease of hypertension is increased to 10.8% (marking the transition of health). However, high rates of infectious diseases such as HIV/AIDS. It can be interpreted as a failure on the second phase of the epidemiologic transition. Although the mortality rate of HIV/AIDS is very high but the results projected life expectancy in East Java continues to increase. Therefore, need new thinking to meet the needs of public health, especially in the older age group.

Conclusion, East Java must adapt to this new reality and to consider various matters relating to health, social, cost and which provide security for the elderly, as experienced by aging societies in developed country.
Dengue Infections And Environmental Temperature In Malaysia: Is It Related?

Mahesh Appannan

Mahesh Appannan; Chong Chee Keong; Rafdzah Ahmad Zaki; Awang Bulgiba Awang Mahmud

University Malaya
Malaysia
mahesh.appannan@gmail.com

Dengue is endemic in most countries in the South East Asia region. The 5 countries surrounding Malaysia i.e. Singapore, Brunei, Indonesia, Thailand and Philippines, have seen large outbreaks in 2013 or 2014. Malaysia experienced its biggest ever dengue outbreak in the year 2014 with a total of 108698 cases, a 151% increase from the previous year. Even more worrying, there were already 62648 cases recorded up to epid week 27 for the year 2015, as compared to 46681 cases in 2014 for the same period. Evidences of dengue cases being on the rise, even with existing preventive measures indicates a need to identify specific reasons for this. In trying to rationalize the reasons, many parameters should be scrutinized i.e. change in regional variation, change in weather patterns, change in national policies, change in circulating serotypes, and also change in vector behavior. Temperature has been a main indicator in causation of dengue. The variable has been included in many predictive models. This study looks at which temperature variable has the best association with dengue infections in Malaysia i.e. minimum temperature, maximum temperature, mean temperature or temperature at 8 am.

This study aims to study the relationship between environmental temperature and dengue infections. This study looks into various temperature variables i.e. minimum temperature, maximum temperature, mean temperature and temperature at 8am and correlate it with dengue cases in 4 different districts of Malaysia.

Dengue data was obtained from the year 2010 to 2015 (until the month of June). Four districts were chosen for the study i.e. Petaling, Kota Bahru, Johor Bahru and Pulau Pinang. The temperature data was also obtained from the meteorological stations at the 4 districts. The data was analyzed using SPSS version 20 studying the association between the environment temperature and dengue infections. Correlation analysis was performed to measure the association between the dengue cases and the variables.

There is a strong correlation between dengue infections and the environmental temperature in Malaysia. All the temperature variables showed significant association with dengue cases. However, among all the temperature variables, maximum temperature shows strongest association with the dengue cases. Environmental temperature is a great predictor to predict the occurrence of dengue infections and could be regarded as an early warning signal. This study would contribute extensively to the knowledge of epidemiology of dengue infections in Malaysia and could give rise to more research opportunities, preventive measures and policies.
Descriptive Study Of Household Clean And Healthy Living Program (Phbs) At Parangloe Tamalanrea, Makassar City

Muhammad Taufiq  
*Muhammad Taufiq*  
Hasanuddin University  
Indonesia  
muhammadtaufiq045@gmail.com

Clean and healthy life behaviors at the household is an effort to empower members of the household to be sober, willing and able to do PHBS to maintain and improve their health, prevent disease and protect themselves from the threat of disease.

This study aims to get a picture of the implementation of the PHBS in order Parangloe households in the Village District Tamalanrea Makassar.

This type of research is a survey of households (household survey) with a descriptive research design. The population in this study is the large sample of 1536 households with 350 households were selected proportionally via the technique of "Proportional Random Sampling".

The results showed that the Household (RT) that performs delivery by health personnel 71.4%, exclusive breastfeeding was 91.1%, weighing babies and toddlers was 94.1%, using clean water by 99.4%, wash hands using soap and clean water by 52.9%, using latrines healthy at 90.6%, eradicate mosquito larvae by 93.4%, eating fruits and vegetables every day by 66.6%, physical activity every day for 98.6%, and do not smoke as much as 28%.

Through this research it is expected that households have the awareness of the importance of clean and healthy lifestyle, especially regarding cigarettes.

It is recommended to every household to better understand the dangers posed by smoking and to the relevant parties to always provide information about the dangers of smoking.
Detection Of Nontuberculous Mycobacteria (NTM) Endosymbiont In Clinical And Environmental Acanthamoeba Isolates In Malaysia.

Anisah Nordin
Anisah Nordin; Faizah Hanapiiah; Adibah Mohd Roslan; Yusof Suboh; Noraina Ab Rahim
Universiti Kebangsaan Malaysia
Malaysia
anisah.nordin@gmail.com

Lung and other diseases caused by nontuberculous mycobacteria (NTM) is an increasing global health problem. NTM is known to share habitats in the environment with Acanthamoeba spp., a free-living amoebae associated with disease of the eyes and central nervous system. Due to this co-habitation, NTM may grow in this amoebae as parasites or endosymbionts and gain protection from disinfectants and antibiotics since Acanthamoeba may form cysts as a mechanism to protect them in a harsh environment. This study was conducted to screen and determine the presence of Mycobacterium DNA in Acanthamoeba isolates obtained from both clinical and environmental samples in Malaysia. Species identification was carried out to determine the commonly associated mycobacteria with Acanthamoeba isolates. Fifty-eight Acanthamoeba isolates maintained in Parasitology Laboratory, Faculty of Medicine, National University of Malaysia were used to evaluate the presence of Mycobacterium. These isolates were from keratitis patients (22) and dust samples collected from air-conditioning vents in wards (19) and operation theaters (17) in a local teaching hospital. All strains were cultivated in 2% Non-Nutrient Agar (NNA) coated with a suspension of heat-killed Escherichia coli and incubated at 30°C. The cultures were monitored every day for up to 14 days. The clones of interest then later were transferred to a new culture plates for molecular techniques (polymerase chain reaction and sequence analysis). Genomic DNA extraction was done based on Bacterial Genomic DNA Isolation Kit, Norgen Biotek, Canada. The presence and size of the amplification products were determined by 1.5% agarose gel electrophoresis and SYBR safe staining. All PCR DNA amplification products were subjected to sequencing and then identified via a basic local alignment search tool (BLAST) using nucleotide blast (blastn) to obtain the closest Mycobacterium and a region of local similarity between the query sequences against all the sequences in a database.

Thirty-four (58.6%) isolates examined contained at least one bacterial endosymbiont of interest. Most of mycobacterial endosymbiont identified were of nontuberculous mycobacteria group (NTM) and are commonly present in the environment. On a total of 22 AK patients, 9 were found infected by Acanthamoeba hosting NTM. The species were identified as M. senegalense, M. fortuitum and M. aurum. Previous study has shown that Acanthamoeba can protect Mycobacteria from chlorine and antibiotics and enhance Mycobacteria virulence. The same finding was reported from wards and operation theaters isolates. Most of mycobacteria identified were M. fortuitum, M. abscessus, M. massiliense, M. senegalense and M. vaccae. However, an Acanthamoeba isolate cultured from dust samples collected from air-condition vent in an operating theatre were detected to have DNA for M. tuberculosis and M. bovis subsp bovis. This is of great public health concern since a clean environment such as an operation theater should be well protected against an infectious agent. The presence of M. tuberculosis and M. bovis DNA in Acanthamoeba isolates from operation theaters warrants further research to determine the viability of this mycobacteria and the possible transmission of this infectious agent through this vector.
Determinant Of Measles Immunization Coverage In Pasuruan District, East Java

Chatarina Umbul Wahyun

Chatarina Umbul Wahyuni; Dwi Wahyu Ningtyas
Universitas Airlangga
Indonesia
Chatrino03@yahoo.com

Measles is one of the infectious diseases that are included in priority health problems, because the disease can be easily transmitted so as to cause an outbreak or exceptional occurrences. High immunization coverage is a picture of an individual's high immunity. Areas with immunization coverage <90% are still vulnerable to measles incidence as yet formed herd immunity. The measles immunization coverage in Pasuruan already exceeded the target, but this should not greatly affect the decline in measles cases. The incidence of measles reach out 199 cases in 2014 at Pasuruan, increase compared to the previous year and cause outbreaks. Human resource is the most large capital base and highly decisive in the development in all fields, especially at the primary health care level have an important role in the implementation of the immunization program both technically and administratively. A qualified workforce is expected objectives of the program can be achieved.

The aim of this study was to analyze determinant of measles immunization coverage and to analyze the influence of measles immunization coverage to the incidence of measles in Pasuruan Regency. This study was an analytic observational with case-control approach. The samples of this study were 30 villages which had measles cases in 2014. The case control taken 30 villages which had not measles cases in 2014. Subject was drawn from a population with simple random sampling technique. Data was collected from interview to respondent by a questionnaire study and observation sheet. The data was analyzed by using linear regression test and logistic regression backward method with the significance level of 5% (α=0.05).

The result of the study confirmed that knowledge (p=0.030), motivation (p=0.018), and the availability of books infant cohort (p=0.021) effect on measles immunization coverage, but influence of knowledge has a negative effect on measles immunization coverage because the value of B negative, thus increasing knowledge will lower measles immunization coverage. And, measles immunization coverage (p=0.357) had no effect on the incidence of measles, it can be due to measles immunization coverage in rural cases studied was higher than in control villages, which means the measles immunization coverage in the majority of the Pasuruan district has reached the minimum target so as not to affect the incidence of measles, but it also must be supported by valid data quality, because the data measles immunization coverage is only 15-24% of East Java valid and accurate. The conclusion of this study the influence of which there are motivation and the availability of books infant cohort to the measles immunization coverage in Pasuruan Regency. Suggestions can be drawn based on the result of this study, first improve the quality of the recording and reporting of the results of immunization, especially the completeness of infant cohorts book. Secondly, establish communication between the officer and to the leadership so that the officer can increase motivation expected. The third, advanced research related to the quality of measles vaccine given incidence of measles in the district of Pasuruan not only occur in areas with low coverage but also in areas of high coverage.
Determinants Of Malnutrition Among Under-5 Population: A Cross Sectional Study In Saitnihuta Village, Humbang Hasundutan District, North Sumatra

Ivan Elisabeth Purba
Ivan Elisabeth Purba; Sandra Simamora; Toni Wandra
Sari Mutiara Indonesia University
Indonesia
tony_wdr2009@yahoo.com

According to WHO, 2005, malnutrition is a serious public-health problem that has been linked to a substantial increase in the risk of mortality and morbidity. A total of 130 million (21% of all children) were malnutrition in 2005. In Indonesia, based on National Basic Health Research, 2010 and 2013, the prevalence of malnutrition under-5 population (pre school children) increased from 17.9% in 2010 to 19.6% in 2013, and in North Sumatra, a total of 335,200 under-5 population (22.4%) were malnutrition in 2013.

The goals of this study are to determine the prevalence of malnutrition and determinants among under-5 population.

A cross-sectional study was carried out in 2014 with a total of 150 randomly selected sample aged 2-5 years in Saitnihuta Village, Humbang Hasundutan District, North Sumatra. Malnutrition defined as under-5 population whose weight is < -2 SD score of the median weight of children of the same age in the reference population.

Results of this study revealed that the prevalence of malnutrition among under-5 population in Saitnihuta Village, Humbang Hasundutan District, North Sumatra was very high (42.2%) compared to the national data (19.6%) and North Sumatra Province (22.4%) in 2013. Bivariate analysis showed that mothers education, mothers job status, socioeconomic, mothers knowledge on nutrition, and role of grandmother-in-low were significantly associated with the malnutrition of under-5 population in Saitnihuta Village, Humbang Hasundutan District, North Sumatra in 2014. Results of multivariate logistic regression models showed that mothers job status, mothers knowledge on nutrition, and role of grandmother-in-low were the most significant factors that had an independent and direct influence on the malnutrition of under-5 children, respectively. To achieve national and the Sustainable Development Goal target of malnutrition prevalence by 2019, it is important to have specific government intervention to focus on the causes that directly influence the malnutrition with consideration of the local areas specific.
Determinants Proxy In Utilization Of Voluntary And Counselling (VCT) In District Northern Sorong Of Sorong City

Sariana Pangaribuan
Sariana Pangaribuan
Stikes Papua Sorong
Indonesia
sarianapangaribuan@yahoo.co.id

Voluntary, Counselling and Testing (VCT) is an activity voluntary counseling and confidential, before and after blood test of HIV. Utilization of VCT still very low, in Sub Sahara 12% of male and 10% of female. In Indonesia, is 18% of injecting Drug User (IDU), 15% of Women Sex Workes (WSW) 3% of WSW customer, and 15% of Mes Sex with Men (MSM).
The aim of the study was to analyze the determinants proxy of Utilization VCT.

The Study was the observational with design cross-sectional study, Sample size was 110 respondents selected by simple random sampling. A statistic analyze with chi-square test and multiple regression at 95% level of significance (p<0.05).

The result, no correlation between independent variabel (knowledge of HIV and AIDS, Counselling, promotion, and sexual behavior) with the utilization of VCT. No correlation between knowledge of HIV and AIDS, Counselling and promotion with the acces of HIV and AIDS services. The utilization of VCT and sexual behavior have a correlation with the acces of HIV and AIDS services. The determinant proxy of access of HIV and AIDS services was utilization ov VCT. It is recommended that utilization of VCT have to obtimized with promotion of VCT and needed the governments commitment to prevent HIV and AIDS.
Developing Of Pattern Child Health Care On Woman Labour In The Factory Cimanggis Depok-Jawa Barat Indonesia 2014

Rindu
Rindu; Astrid Novita
Indonesia Maju School of Health Sciences
Indonesia
rindualghie@gmail.com

Progress of economic and educational level of women make a lot of housewives who work outside the home that affect parenting mother to child, but adequate care is very important for the sustainability of development.

This study aims to find a description of parenting mothers and important aspects that affect the development process of parenting and child health in women who worked in factories in the area Cimanggis Depok in 2014.

This study used a mixed method design which combines quantitative research with cross sectional study design and intrinsic qualitative case studies. The study was conducted in three factories of the Month February 2014 - February 2015. The samples were 40 respondents with details of 30 key informants and 10 support informants in qualitative research.

Data were analyzed using thematic analysis using triangulation. The results showed no relationship between socioeconomic (p value = 0.026, OR 12.143), family circumstances (p value = 0.024, OR 7.000), the state of health of the family (p value = 0.009, OR 10.000), and the family environment (p value = 0.045, OR 7.000 ) against maternal parenting factory workers in the area Cimanggis Depok while other variables are not related. From the qualitative results in mind that communication is the most important factor of parenting are applied, especially on working mothers. The conclusions of this study is that there is a relationship of socioeconomic factors, family circumstances, state of health of the family and the family environment with maternal parenting factory workers and besides communication becomes the most important factor. There needs to be a pattern of good communication, so as to create the ideal parenting.
Dietary Habits In Coastal And Mountain Community

Inne Soesanti
Inne Soesanti
Universitas Airlangga
Indonesia
insantie@gmail.com

Pasongsongan village located in the northern part of the Sumenep Regency in Madura Island. The village has a different geographical conditions, namely the coastal and mount. On the coast the majority as fishermen and as farmers on the mount. Based on data from the Health of Department Kabupaten Sumenep, in the Pasongsongan village there is early childhood stunted the number of 37, with severe stunted 60% are in the coastal region. The aim of this research is to describe the dietary habits on coastal and mount societies in Pasongsongan village.

The aim of this research is to describe the dietary habits on coastal and mount societies on Pasongsongan village.

Qualitative method is used in this research. The research involved 6 informen. Methode of data collection are observation, interview and taking documentation to support the obtained data. Analysis of data is used analysis content.

Result of this research shows that diet of coastal society is the staple food rice corn, maize or rice mixed with white rice. Animal protein diet is fish in every day during the fishing season. They eat chicken and beef when the celebration, and they rarely eat vegetables. They often eat egg, tofu and tempe during the lean season fish. In the mount society, the staple food is maize rice and white rice. Animal protein is consumed when fishing season and no fishing season. Chicken and beef is consumed when the celebration. They eat eggs, tofu, tempe, vegetables and fruit with many variation.

Conclusion of this research shows that Village geographical conditions affect the diet of society living in coastal areas and mount. Both of them are often eat fish. But in the lean fishing season, coastal society do not eat fish. It has shown that the unhealthy dietary habits is practiced in coastal area. Therefore, it needs to be given nutrition education intervention to coastal society.
Differences Of Comprehension Level Of Nurse Before And After Giving Safety Information Release Of Patients Through Audio Broadcast In Hospital (Quasi-Experimental Studies At RSUD Ratu Zalecha Martapura)

Nur Laily

Nur Laily; Ratna Setyaningrum; Fauzie Rahman; Laily Khairiyati

Public Health Department Medical Faculty of Lambung Mangkurat University

Indonesia

laily.nur15@ymail.com

Nurses as health care providers must be able to participate actively in achieving patient safety one of them avoid unexpected events. Data obtained from KKPRS RSUD Ratu Zalecha some avoid unexpected events in the hospital. This can be prevented with increased ability of nurses to provide continuous information.

This study aims to explain the differences of comprehension level of nurses before and after giving patient safety information through audio broadcast in the hospital

This research is a quantitative research using quasi-experimental approach with one group pre- and post-test design. The study population as much as 175 nurses, a sample of 48 respondents were determined using purposive sampling technique. Treatment variable is the provision of health promotion of patient safety information through audio broadcast in the hospital, While the dependent variable is the comprehension of nurses giving patient safety in RSUD Ratu Zalecha.

The results showed before giving patient safety information through audio broadcast as much as 42 respondents (87.5%) have a good comprehension. After giving patient safety information through audio broadcast as much as 47 respondents (97.9%) had a good level of comprehension. Based on the Wilcoxon test, showed no significant difference in the comprehension level (p = 0.076) before and after giving patient safety information through audio broadcast in the hospital. Further research is needed to determine the effectiveness of this method by the number of respondents that more and longer time, specific time
Aedes is the largest genus of mosquito in Malaysia with 105 species. It is well known for their role as an important vector for various infectious diseases. In Malaysia, Aedes is the most important in the transmission of a much feared disease known as dengue fever. This disease has been causing outbreak in Malaysia with the first reported outbreak in 1962 and the number of reported dengue cases has been increasing along the years.

A survey was conducted to study the distribution of Aedes spp. from various habitats in the west coast of peninsular Malaysia.

Sampling was done from various habitats, which include a coconut plantation, coastal area, secondary forests and Malay suburban settlement. Bare Leg Catch technique (BLC) was performed by allowing adult mosquitoes to bite exposed skin. A plastic tube was then used to trap the mosquitoes. Pupae and larvae were collected using tray and pipette.

Aedes spp. was found from all selected habitats. The most dominant species was Ae. albopictus (65.2%), followed by Ae. butleri (26.7%), Ae. aegypti (3.1%), Ae. niveus (2.2%), Ae pseudoalbopictus (0.9%), Ae (Verralina) sp. (0.6%) and 0.3% each for Ae. vexans, Ae gardnerii imitator, Ae (Cancraedes) masculinus and Ae (Paraedes) collessi. Most of the species collected in the study especially Ae. albopictus and Ae. aegypti were of medical importance since these mosquitoes are the most important vectors for rural and urban/suburban dengue fever virus. Other Aedes spp. (Ae butleri, Ae niveus and Ae vexans) has also been linked to various diseases as indicated by previous researchers in Malaysia.
**Effect Of Chronic Exposure To Beta-Agonists Compounds On Freshwater Cladoceran Daphnia Magna, And Potential Mechanisms Of Repartitioning Agents**

**Cysteine Y. H. Chen**  
*Cysteine Y. H. Chen; Algui K. F. Chen; Ken K. S. Wang*  
School of Public Health, Chung Shan Medical University, R.O.C.  
Taiwan  
jay520leejom@yahoo.com.tw

Beta-adrenergic agonists are compounds that alter the ratio in which dietary energy intake is partitioned between lean tissues versus fat tissue, resulting in a favorable shift in the lean:fat ratio of growing animals induces the potential impact on the aquatic environment. In this study, the acute and chronic effects of beta-agonists compounds have been investigated on freshwater crustacean *Daphnia magna*.

In this study, the acute and chronic effects of beta-agonists compounds have been investigated on freshwater crustacean *Daphnia magna*.

In this study, neonate acute toxicity, embryo toxicity, and maternal hereditary influenced test were used for estimate the toxic effect of ractopamine and clenbuterol on *D. magna*, respectively. Five other endpoints were examined including mortality rate, embryo development inhibition rate, teratogenic rate, intra brood chamber death and offspring survival rate were observed after 7 days.

So far, in this study clearly demonstrated that Ractopamine and Clenbuterol may cause acute toxicity and teratogenic effect in both neonate and embryo of *D. magna*. Ractopamine is more toxic than Clenbuterol on the embryo, neonate and maternal of daphnids. The effects of Ractopamine on maternal of *D. magna* were shown aborted in brood chamber, embryo growth retardation, and intra brood chamber death. UVC treated Ractopamine may decrease the toxicities on the *D. magna* (p < 0.01).

The present study clearly demonstrated that beta-agonists compounds may cause acute toxicity and teratogenic effect in both neonate and embryo of *D. magna*. After 7 days of exposure to beta-agonists compounds, *D. magna* have showed significant adverse effects on survival of offspring.
Effect Of Environment Characteristics Breeding (Breeding Site) Against Anopheles Larvae Density In The Village District Of Tegalombo Ngreco Pacitan

Titik Haryanti
Hendi Kristanto; Titik Haryanti, Nine Ellisa M
Faculty of Public Health University of Veteran Bangun Nusantara Sukoharjo Indonesia
haryanti.titik@gmail.com

The introduction of mosquito breeding sites and larvae density is very important in vector control efforts because of population control can be done by eliminating mosquito breeding places. The purpose of the study was to determine the influence of breeding site characteristics on the density of larval Anopheles in the Village District of Tegalombo Ngreco Pacitan Indonesia.

The study was observational with cross sectional approach conducted in four sub-district Hamlet Village Ngreco Tegalombo Pacitan in May - June 2014. The population and the sample contained 15 breeding sites of Anopheles larva were found in four hamlets namely Krajan, Gamping, Nglodo, Jajar in the village Ngreco. Accidental sampling is a sampling. The analysis used is multiple linear regression with $\beta = 0.05$

The results of the study of Anopheles larva breeding sites found as many as 10 pools, 2 rivers, and 3 paddy. based on multiple linear regression. The influence of the density of Anopheles larvae is temperature ($p = 0.006, p <0.05$), humidity ($p = 0.002, p <0.05$), salinity ($p = 0.008, p <0.05$), Animal water ($p = 0.001, p<0.05$). The lack of influence on the density of Anopheles larvae water depth ($p =0.093, p > 0.05$), pH ($p = 0.492, p> 0.05$). Multivariate analysis with multiple linear regression found that temperature, humidity and animal water related to the density of Anopheles larvae. Advice to agencies and the public to always monitor the place as a potential breeding ground for Anopheles larvae and the eradication of Anopheles larvae to the public free of malaria.
**Effect Of Modifiable Risk Factors On Hypertension And Coronary Heart Disease In The City Of Padang: A Hospital-Based Matched Case Control Study**

**Mona Lisa**  
*Mona Lisa; Defriman Djafri; Ratno Widoyo*  
Andalas University  
Indonesia  
monalisacha11@gmail.com  

Epidemiological studies have established a strong association between hypertension and coronary heart disease. Hypertension, diabetes mellitus, dyslipidemia, obesity and hyperuricemia are risk factors for coronary heart disease.

The aim of this study is examining the role of modifiable risk factors association between hypertension and coronary heart disease in the central general hospital Dr. M. Djamil Padang, in 2013. From December 2014 to April 2015, we conducted a hospital-based matched case control study among a randomly selected sample by matching the age and sex of medical record (secondary data). We studied 171 samples with a 1:2 ratio between the case and the control. Data were analyzed using McNemars test and conditional logistic regression for multivariate modeling.

Result of this study show that the variables associated with coronary heart disease are hypertension (OR=16.04, 95%CI 5.705-45.12), obesity (OR=2.53, 95%CI 1.321-4.844), and hyperuricemia (OR=2.41, 95%CI 1.292-4.516). Multivariate modeling identified hyperuricemia as a confounder for the causal hypertension and coronary heart disease. The adjusted risk factor hypertension on coronary heart disease after controlling hyperuricemia is 15.86. The magnitude of the effect of hypertension on coronary heart disease was 15.68. People are expected to manage their blood pressure to decrease the risk of coronary heart disease.
Effect Of Occupational Health Promotion To CHD Risk Factors Among Coal Mining Worker Of PT. ZA Year 2014

Nur Ani

Nur Ani; Hendra; H. E. Kusdinar Achmad
Universitas Indonesia
Indonesia
nur.ani8@yahoo.com

Disease of hyper-cholesterolemia, hypertension and smoking behavior is a risk factor for coronary heart disease (CHD), which became the number one killer disease in the world (Dilley: 2000). Based on experimental research, epidemiology, and clinical states that the role of high cholesterol, and smoking habits affect the incidence of coronary heart disease (Allen: 2001). Based on data from the health examination at company PT ZA compared with South Kalimantan condition that CHD risk factors (total cholesterol, smoking and blood pressure) is still high enough to do health promotion interventions.

This intervention aims to determine the degree of reduction in risk of coronary heart disease (CHD) after the media health promotion intervention group A and group B media among miners of PT ZA Year 2014.

This is a quantitative study by using quasi-experimental design. Subject of study was selected from Medical Check up report 2013 who has risk factor of CHD including smoking, cholesterol exceed the normal limit, dyslipidemia and/or pre-hypertension or hypertension. Sample divided into two groups with group A 25 workers and group B 30 workers. Both of groups are getting different mode of health promotion intervention programs related to CHD. Effects of intervention mode were analyzed to obtain a mode of intervention that have significant to decrease the CHD risk factors in group A and group B.

These results are a significant decrease between total cholesterol measurement results before the intervention to after intervention in group A, a significant decrease between the results of measurements of changes in smoking behavior before the intervention to after intervention in group A and in group B, there was no reduction significant in systolic blood pressure before and after the intervention in group A, whereas no significant reduction in systolic blood pressure before and after intervention in group B, a significant decrease between the results of measurements of diastolic blood pressure changes between the pre-intervention to post-intervention in group A and group B, a significant difference in the reduction in CHD risk factors between the before to after intervention in group A and B batches, there are significant differences between the use of a more effective medium than in medium B in the intervention and risk factor reduction in total cholesterol reduction. Health promotion interventions using media booklet, counseling, nutrition counseling, health seminars able to deliver positive changes in health behavior changes.
Effects Of Traffic-Related Air Pollution On Low Birth Weight And Small For Gestational Age: A Hospital-Based Case-Control Study In Bangkok.

Vajanapoom Nitaya  
Vajanapoom Nitaya; Tarwireyirwodzi Desire; Jirakajohnkool Supet; Langkulsen Uma  
School of Global Studies, Thammasat University, Pathumthani, Thailand  
nvajanapoom@sgs.tu.ac.th

Effects of traffic-related air pollution on low birth weight and small for gestational age

To know the effects of traffic-related air pollution on low birth weight and small for gestational age

We conducted a hospital based case-control study to investigate the effect of traffic air pollution on low birth weight (LBW) and small for gestational age (SGA). Cases consisted of 129 full term LBW infants and 72 SGA infants delivered between January 2012 and March 2013 in 5 major hospitals in Bangkok. Using an inverse distance weighting approach, we estimated the monthly average concentrations of criteria pollutants, and assigned them to mothers at their geocoded residential addresses. The effects of traffic-related air pollutants on LBW and SGA were estimated using multiple logistic regression.

Overall, we found positive and significant effects of traffic air pollution for SGA, but not for LBW. Nitric oxide (NO) had significant effects on SGA during the 1st trimester (OR 1.01, 95% CI 1.06 1.37) and 2nd trimester (OR 1.06, 95% CI 1.07 1.42). All other pollutants, except carbon monoxide (CO), had some positive effects though non-significant. Our study provided evidence of the effect of traffic-related air pollution on LBW or SGA for women in Bangkok, and suggested the need for minimal exposure to air pollution during pregnancy.
Elderly Friendly Village Program Lesson Learn Effort To Community Based To Improve Of Health Ageing In Bantul Distric Yogyakarta Indonesia

Dwi Endah  
*Dwi Endah, Ratna Kusumaningsih*  
CS Foundation  
Indonesia  
d.endah@yahoo.com

The program called Elderly Friendly Village Program. Community based is the this programs concept. It located at village Pleret Bantul district Yogyakarta, Indonesia. Number of old people at this place are 155 elderly. Determine into disable elderly and productive (still active). This program has build since 2 years ago until now.

Aim of this study is to know contribution of elderly friendly village program to improve health ageing. Method of this study is qualitative approach with case study, and 23 sample.

Results have some program elderly care like mobile education, give information for family and neighbor, long term care, hello elderly, campaign for elderly care in village, home visit, clean the house of elderly, monitoring vital sign. For running elderly friendly village program have elderly friendly companion such as volunteer from the local community. Local community do monitoring health status each elderly, be assist doctor, nurse for home visit program. Progress this program, 64% have normal blood pressure, within a mount ago not found of communicable diseases (0%). Nothing of communicable disease because of in there clean the house program for elderly.

Impact of long term care program many member of program have significant progress. Be found one elderly able sitting after seven years ago she cant do it because of stroke. In addition, a major contributing factor is the presence of a friendly elderly volunteer. Given training patterns to improve motivation and training minor movement for the elderly. Program of Healthy car is very helpful for the elderly for making them eassier to go to a health center or hospital. This car in the form of a 24 hour supporting elderly friendly program. Total of 100% of elderly feel more comfortable with the program.
Empowerment Of Municipal Public Health Nurses Affected By The Great East Japan Earthquake: Examining The Support Provided Through The Health Promotion Plan Development In Minamisanriku, Miyagi Prefecture

Katsuko Suenaga
Katsuko Suenaga; Koko Takahashi; Ayumi Kurimoto; Yumiko Nemoto; Yoshie Aita; And Naoko Sato
Tohoku University
Japan
kknoel@med.tohoku.ac.jp

The Great East Japan Earthquake of March 2011 was one of the most catastrophic natural disasters ever recorded. The massive tsunami of more than 15 meters height caused crushing damage to Minamisanriku, Miyagi Prefecture. Not only did municipal public health nurses (PHNs) support the stricken inhabitants during the disaster, but they were also affected by it, and were in a state of extreme stress. Many external supporters came to Minamisanriku, and offered a helping hand for the stricken inhabitants, but the municipal PHNs were unable to provide them the data on the local situation. The main reason for municipal PHNs inability to understand the essence of community health problems was that they worked with a high-risk approach without collaborating with inhabitants before the disaster. Through an action research, we supported them to regain their original specialty as a public health nurse, from the time of the disaster until the present.

The main focus of our support was to empower municipal PHNs affected by the Great East Japan Earthquake, such that they got back their specialty and identity of a public health nurse. The purpose of this study was to describe the details of the support provided to municipal PHNs in Minamisanriku, who were affected by the Great East Japan Earthquake, and the process of change which they tackled in the 2nd health promotion plan development, a first step towards the collaboration with inhabitants from the time of the disaster until March 2015.

This action research used the method suggested in the Capacity Development Model (CD model). The CD model consists of five strategies: Exposure, Empowerment, Enhancement, Exercise, and Excitement. Exposure is a strategy that helps subjects judge and tackle the health problems in the community, Empowerment reinforces the individuals capacity as a PHN, Enhancement involves using fortified capacity in daily health activities, Exercise involves working on solving community health problems, and Excitement means improving their ability to solve more problems and motivate them to accept new challenges. The activity of the researchers was based on the CD model such that the municipal PHNs working in Minamisanriku could demonstrate their specialty. This study was conducted from the time of the disaster until March 2015. Seven PHNs working in Minamisanriku took part in this action research. The purpose and procedure of the study were explained to the participants and they were informed that they could withdraw from the study at any point. Ethical approval was provided by the institutional review board of the Tohoku University Graduate School of Medicine. The details of the activities of the researchers and participants were saved using field notes or an IC recorder. We analyzed these records using qualitative description.
The first strategy: The researchers participated in healthcare activities in Minamisanriku to determine the cause of the difficulties faced by municipal PHNs since the disaster, and examined their related activities. We identified what PHNs should be like, and how PHNs should solve community health problems. This was performed repeatedly for approximately two years. (PHNs) Through their relation with us, municipal PHNs noticed that they must act in the district charge system, and collaborate with inhabitants to facilitate health promotion in the community.

Second strategy: We thought that PHNs needed the opportunity to repeat their questions on public health activities were when they left their workplace. Therefore we advised two PHN leaders to attend community nursing management training. (PHNs) Two leaders attended this training to learn management and methods of solving community health problems. Through the training, they reviewed the role of PHNs and the consequences of the healthcare activities in the district charge system.

Third strategy: (PHNs) Two leaders decided to develop the 2nd Health Promotion Plan in Minmisanriku as a first step towards collaboration with the community inhabitants. Then they realized that the partner who they wanted to practice district health activities with, were district health leaders [within the inhabitants]. We agreed to support them in the plan development process. We suggested that a district round-table conference be conducted with the member health leaders, and supported them. (PHNs) In the conference, PHNs exchanged opinions with health leaders about the actual condition of the district and health problems/promotion activities. The researchers repeated the learning and dialogue to make the PHNs aware of the consequences of the health care activities in the district charge system and the collaboration with inhabitants. (PHNs) They reconsidered the district charge system, local accountability, collaboration, and ideal attributes of a PHN.

Fourth strategy: We reinforced the role of the researcher so that the PHNs could do it autonomously. We reconfirmed that the developed plan was a tool to facilitate district health collaboration activities, and that it led to health promotion in the inhabitants via the plan that was developed by the PHNs and inhabitants together. We wrestled in preparation for plan development together. (PHNs) In the meeting of health leaders, PHNs arrived at an agreement about district health activities and plan development. They were active during plan development, while confirming the meaning and importance of collaboration several times. The health conscious investigation of the inhabitants was conducted in collaboration with district health leaders and municipal PHNs.

The fifth strategy: We are currently supporting this strategy. (PHNs) Municipal PHNs have started experiencing the joy involved in conducting healthcare activities in collaboration with the inhabitants. Municipal PHNs reconsidered the meaning of their own healthcare activities that they experienced after the disaster. They noticed the need to switch to health activities using the district charge system, and reviewed the consequences of health activities conducted in collaboration with the inhabitants. They regained independence/autonomy as PHNs, and were empowered.
Energy Intake Of Breastfeeding Mother And Predominant Breastfeeding In Puskesmas Kalangan, Tapanuli Tengah Regency 2015

Syafiq A
Devi Suryanti Sihite; Syafiq A; Sandra Fikawati
Public Health Faculty University of Indonesia, Indonesia
vi2_pu3aries@yahoo.com, asq69@yahoo.co.uk, fikawati@ui.ac.id

Studies show that maternal lactation energy intake associated with milk production. One of the cause of the failure of exclusive breastfeeding is the low energy intake during breastfeeding mothers. Intake of energy consumed by nursing mothers is far below the recommended energy recommendations. Lactation when energy intake is increasingly important in the second trimester maternal lactation because fat reserves depleted and nutritional needs of infants increases with growth.

This study aims to know about the relationship between consumption of energy by breastfeeding mother and predominant breastfeeding at Puskesmas Kalangan, Tapanuli Tengah regency 2015

This primary study with cross sectional design was conducted on March-April 2015. The samples of this study were all mothers who have above 6 until years old babies, registered at Posyandu, and live around Puskesmas Kalangan and among totalling 109 mothers. The analysis of this study are chi square and multiple logistic regression.

The result shows that there is a significant relationship between consumption of energy at the sixth month of breastfeeding mother (p=0.003), knowledge mothers about breastfeeding (p=0.002), and support of health workers (p=0.012) with delivering predominant breastfeeding. Most dominant variable related yo delivering predominant breastfeeding is consumption of energy at the sixth month of breastfeeding mother (OR=8.9) after having taken control by support of husband, job, health worker support. Mother with less energy intake at six months of breastfeeding mother had a 8.9 times greater risk for not predominant breastfeeding than women with sufficient energy intake in the sixth month of breastfeeding. The need for the provision of information and education on the importance of breastfeeding mothers to increase energy intake and food supplementation in the second trimester of breastfeeding mother.
Enhancing Knowledge And Breastfeeding Awareness Through Peer Breastfeeding Program At Cempaka Village In 2013

Vina Yulia Anhar

Vina Yulia Anhar, Muhammad Adnani, Muhammad Ridho Fadillah, Husda Oktaviannoor, Victor Tampubolon, Raisa Nabila Ramadhani, Ema Novita Deniati, Uswatun Khasanah, Nurlyana, Atikah Rahayu

Lambung Mangkurat University
Indonesia
anharvinayulia@gmail.com

The general objective in point number 4 and MDG 5 is to reduce child mortality and improve maternal health. In 2013 figures in the infant health care coverage Banjarbaru amounted to 40.51% of the target set out in the strategic plan in 2012 that is equal to 86%. Figures health care coverage of children under five Banjarbaru for 43.29% of the target of the strategic plan in 2012 amounted to 81%. While the goal of MCH services one of which is to provide counseling to pregnant women about exclusive breastfeeding. According to the results of a community diagnosis carried out on 91 respondents, found that the most dominant problem in the Cempaka village is the lack of exclusive breastfeeding. In accordance with the results of a community diagnosis, exclusive breastfeeding in the village Cempaka only amounted to 51.6%, still well below the national target.

To identify maternal and child health problems related exclusive breastfeeding at Cempaka village as well as provide solutions through breastfeeding peer counselor.

Used a questionnaire to find out problems and maternal and child health in Cempaka District. Problems related to maternal and child health in Cempaka District prioritized using Multiple Criteria Utility Assessment (MCUA) with criteria and weights adjusted by mutual agreement. Based on the MCUA technique, it was found that the most priority problems are related to exclusive breastfeeding. The factors that affect exclusive breastfeeding into a priority issue described using the fish bone diagram which consists of the human factor, funds, policy, method and environment. Having obtained a priority issue, then made efforts to solve the problem with some alternative solutions to problems. From some of these alternatives, have been one alternative solutions to problems by using MCUA techniques, namely peer breastfeeding.

Through the results of these priorities in mind that the problems with the highest assessment score is the problem of low coverage of exclusive breastfeeding at 88 points. So it was decided that the priority issue preferred from 7 problems found in the village Cempaka is the low coverage of exclusive breastfeeding.

Criteria on the prevalence of the problem with a score of 4 (high at 40.01 to 60%) due to as much as 56.04% or 51 respondents mother in the Cempaka village not provide exclusive breastfeeding to their children.

Criteria on gravity with a score of 4 (very influential) due to problems of low coverage of exclusive breastfeeding would have a negative impact on the nutritional status and growth of the baby, giving
rise to the gravity of the incidence of diseases such as diarrhea, vomiting, and indigestion baby in Cempaka village.

Criteria on the sustainability of the program with a score of 4 (very poor) because they were not able to carry out independently so that the necessary monitoring is quite serious.

Criteria on the public's attention with a score of 3 (the attention) because mothers who have babies or toddlers and society has two roles that a subject would mean an active role participating in activities to increase coverage of exclusive breastfeeding, and mothers with infants or toddlers as an object, which means activities directed back to the community run village North Loktabat terms of both benefits and results as well as support from family until provide encouragement and motivation to the respondents to exclusive breastfeeding.

Criteria on policies with a score of 4 (very supportive) due to the government policy related to the recommendation of exclusive breastfeeding by the clinic in particular. However, this policy received less serious responses and awareness by citizens in particular respondent. The proof still breastfeeding coverage has not reached the expected target, amounting to 56.04%, still below the target of 80% national indicator.

Low coverage of the practice of exclusive breastfeeding is caused by many things, but the most common found is low awareness about the importance of breastfeeding as recommended. This is in accordance with the circumstances that occurred in the Cempaka village is still a lack of knowledge and awareness of the importance of breastfeeding mothers exclusively.

One effort that can help improve the coverage exclusive breastfeeding in the Cempaka village is through peer breastfeeding or breastfeeding peer counselors. Breastfeeding peer counselor program is an effort to optimize the activities of exclusive breastfeeding counseling. Peer counselors help improve breastfeeding success by providing support to the concept of mother-to-mother. Peer counselors have personal experience and training to help mothers to breastfeed. Mothers who have peer counselors often choose to breastfeed. Counselor job is to help mothers by encouraging them to breastfeed their child with exclusive breastfeeding.
Enhancing The Scope Of Sexually Transmitted Infections (Stis) As Early Detections To Prevent HIV And AIDS In Sidoarjo

Firman Suryadi Rahman
Firman Suryadi Rahman; Arief Hargono; Fransisca Susilastuti
Airlangga University
Indonesia
firmsuryadirahman@gmail.com

HIV (Human Immunodeficiency Virus) is a virus that causes immune deficiency in human body. AIDS (Acquired Immune Deficiency Syndrome) is the group of symptoms caused by the immune deficiency. East Java is the second province with the highest cumulative number of HIV and AIDS sufferers in Indonesia in 2014. Its cumulative number of HIV sufferers is 19,249, while the number of AIDS sufferers is 8,976. In Sidoarjo, the number of HIV/AIDS cases tends to increase in the last four years. Besides, Sidoarjo is one of six regencies with the highest number of AIDS sufferers in East Java.

The objectives of this analysis were to study and analyze the outcomes of HIV and AIDS programs in Sidoarjo Health Office, the prevention, case detection, treatment and rehabilitation. The methods used in the analysis of the problems were observation and documentation. The determination of problem priorities was done by using CARL method. The determination of the root causes of the problems was done by using Fishbone Diagram. Recommendations were given based on the result of root causes analysis.

The number of identified problems was 11. The problem that became the first priority problem was the scope of STIs in 2014 which was still 21% with CARL score of 11472. The programs that achieved the targets were condom distribution of 100%, and counseling and testing for the number of HIV sufferers who were screened for TB symptoms. The programs that did not achieve the targets were STIs scope that was still 21%, PMTCT scope that was still 0%, PLWHA scope that were sent to Civil Society Organizations (CSOs) for care that was still 15%, and PLWHA patients that still had ARV treatment of 33.5%.

The problem that became the priority was STIs scope that was still 21%. The root causes of the problem were not all the program holders in Puskesmas (health center) knew about STIs form, most program holders did not get any training yet, some program holders had double job, data record from non VCT Puskesmas was not recorded in SIHA, not all Puskesmas had syphilis reagent and rotator, there were still patients who did not know about STIs and felt ashamed to have themselves examined, and the lack of training budget. Recommendations for a solutions are training for program holders, increasing CIE, and held a screening programs.
Environmental Sanitation And Children Behavior Related To Worm Disease In Soligi Village, South Obi District, South Halmahera Regency, North Maluku Province.

Suyud Warno Utomo
Suyud Warno Utomo; Abdur Rahman; Hayoto Kusnoputranto; Randy Novirsya Zani Suhantanto; Muhammad Fajar Subechi; Miladil Fitra
Faculty of Public Health, Universitas Indonesia
Indonesia
sw_utomo@yahoo.com

Soligi is a remote area located in Obi Island, North Maluku. Boats is the main transportation to get to this village. Soligi has lack of facilities and infrastructure include health facilities. Based on Rahma information, the only one medical officer in Soligi, 9 of 10 children who administered with helminthic were confirmed of worming. It meant 90% of children were positive.

Therefore, it is important to conduct a study about factors that related to worm disease in children.

The research will be conducted by direct assessment to environmental factors and children health behavior. Research had been conducted on June, 2015 with deep assessment.

Results showed that enviromental sanitation was still lower of standard. There were many peole who still doing defecation behind their house, beach, and other open land. Human and animal feces could be found everywhere. Well was used as main clean water source, but lack of standard. So that waste water could penetrate into the well. Many moist and dirty area around the house and rubbish could be found everywhere. Drainage was not well functioned. Domestic waste was channeled directly to open area, but some using septic tank. Children were used to play around without sandals and eat without washing hand using soap. It was not all houses have toilet. It could be concluded that environmental sanitation was still low of standard, lack of knowledge and bad bahavior. It was important to improve environmental health knowledge among people, environmental sanitation, and strenghthen healthy behavior to prevent infection of worm from environment. It was also to improve health facilities and medical human resource.
Evaluasi Implementasi Kawasan Tanpa Rokok (KTR) Di Kota Solok

Ayulia Fardila Sari ZA, SKM, MPH
Ayulia Fardila Sari ZA, SKM, MPH, Sri Rahma Putri, SKM
Universitas Andalas
Indonesia
ayuliafardila@gmail.com

Solok Town is a town in West Sumatera which implement No Smoking Area based on Mayor Regulation number 5 in 2013. Based on beginning observation, there is still such trespassing exist such as the existence of cigarette advertisement board and peoples who smoke in No Smoking Area.

This research has goal on measuring how far implementation of No Smoking Area in Solok Town.

Qualitative Research Method with depth interview, observation, and document analysis. In order to determine sample, purposive sampling is used on 15 peoples who consist of local government and peoples who are working on No Smoking Area. The process of data uses triangulation source and triangulation method.

It is found that there are relatively many trespassing in No Smoking Area implementation, such as there are many people who smoke in No Smoking Area who do not know there is regulation in No Smoking Area, socialization which is not optimal yet, the lack of supervisors, and also the lack of societies awareness. Culture factor makes a cigarette as a tool to invite people to come to wedding party also runs after the implementation of this regulation.

The implementation of No Smoking Area in Solok Town is not suitable yet with the content of policy which is Mayor Regulation number 5/2013. It is suggested that Solok Town local government creates founder and supervisor for policy and create clear sanction and be emphatic on every trespassing. Further research is demanded to measure factors that influence behaviour and Societys awareness in smoking in Solok Town.
Evaluation And Implementation Dengue Fever Surveilans, Salatiga City, Indonesia, 2013.

Prima.K.Hamzah
Prima.K.Hamzah; H. Kusnanto; D. Widarsih
FETP Indonesia
Indonesia
rimakhamzah@gmail.com

Dengue fever cases have higher three times from the previous year. Based on Salatiga Health Department, incident rate increased from 12.83 up to 31.72 in 2013. From the data described implementation of dengue fever surveilans were not applied optimally.

It is a result, Salatiga Health Department should identify weakness of dengue fever surveilans implementation.

The study was designed by observational descriptive. This study was conducted from May-June in 2014. The weakness identification was done through several stages: (1) collection of disease incidence and prevalence dengue fever, (2) direct interview to the program managers of sanitation higienitas Public Health Centre (PHC) in Salatiga and (3) collation of data into a table consist of aspects of inputs, processes, outputs and outcomes.

Input aspect; surveillance of dengue fever employees consist of 2 men and 6 women from PHC in Salatiga. Education of employees are diploma about 83.3% and nurse diploma about 26.7%. Process aspect; the form of monthly report and patients identity report have not available, even report from PHC and hospital are low about 50% and 0%. Limitation of knowledge and skills to preserve and analysis surveilance data were about 16.67%. Output aspect; Case fatality rate increases up to 1.6 exceeding the limit of national target. Moreover, the rate of free larva which does not achieve the target is about 95%.

Implementation Dengue fever surveillance in Salatiga at 2013 is not optimal. Therefore, Health Office and Public Health centre should increase employee capacity and ability by providing Dengue Surveillance training and enhance the ability to process and analyze data surveillance.
Evaluation Of Case Based Measles Surveillance (CBMS) In Kulonprogo District, Yogyakarta Province, Indonesia, Year 2013

Merlyn Sinaga
Merlyn Sinaga
FETP UNIVERSITAS GADJAH MADA
Indonesia
sinaga.merlyn@gmail.com

Kulon Progo is one of the districts in Yogyakarta Province has been implementing CBMS since 2009. The aim of this study was to evaluate of CBMS surveillance system in Kulon Progo District.

Because of The aim of this study was to evaluate of CBMS surveillance system in Kulon Progo District.

This study was descriptive observational study. Respondents were 21 surveillance officers in public health centers (PHC) and District Health Office (DHO) were interviewed by using questionnaire in November 2014.

Results: Surveillance officers had not received training of CBMS was 81.0%, but refreshing program had been held 3 times in 2013. Completeness of weekly report (W2) and monthly reports (C1 report) more than 90% were 100.0% and 47.6%, timeliness of the W2 and C1report more than 80% were 85.7% and 0%. Total of clinical measles recorded by DHO were 218 cases while total of clinical measles collected from all health centers were 210 cases. There were 6 health centers (28.6%) with different cases number with DHO. Based on data of DHO, 82.6% (180 cases) were taken blood specimen and 61.1% (110 cases) were taken before appearance of rash symptom in 4 days or over. The results of the laboratory examination; 8 measles positive, 48 rubella positive, 2 measles equivocal and 8 rubella equivocal. Positive predictive value (PPV) of measles was 4.44%. There were 38 (17.43% of all clinical measles) cases were not taken specimen; 47.37% cases refused in hospital for additional treatment costs if specimen was taken , 39.47% cases refused in health centers for taking specimen even though it was free service and 13.16% difficulty for taking blood of young age.

Conclusion: Quality of validation data need to improve between surveillance officers of PHC and DHO to obtain the same data. Specimen of clinical measles has reached national target (at least 80% of all clinical cases). Measles specimen collection should be done within 4-24 days after rash symptom to increase PPV. Measles surveillance should be run together with rubella surveillance so the criteria of specimen also consider of measles and rubella symptoms. Directly reporting system needs to be established from hospital to health centers without through DHO so the specimen of cases from hospital will be taken by health center in accordance its working area rapidly.
Evaluation Of The Implementation Of Basic Research In South Sulawesi

Dr. Muhammad Ikhtiar, SKM; M.Kes
Dr. Muhammad Ikhtiar, SKM; M.Kes
Dr. dr. H. Muh. Khidri Alwy, M.Kes
Lukman Harun, SKM
Mansur Sididi, SKM
UNIVERSITAS MUSLIM INDONESIA
Indonesia
ikhtiar kesling@gmail.com

Basic of Indonesian Health Research in 2013 was a performance measurement of regional health development in regions or cities through Indonesia. Evaluation of implementation of basic health research in 2013 in Province of South Sulawesi was conducted by taking two regencies as a sample of evaluation, district of Pangkep and Bantaeng.

The main purpose of the study was to detect the suitability of data collecting process found by research and validator team.

The area study was located in District of Pangkep and Bantaeng as sample area of the program. The length of study was five months, from June to October 2014. While the population was all of household in the census block (CB), consisting of 12 CB or 120 Household for Pangkep and 11 CB or 110 for Bantaeng.

The result of distribution respondent in Pangkep from the total of 390 samples, 178 men and 213 women. The percentage of household was 27.9%, wives/husband 24%, children 43%. While in Bantaeng, the total of 315 samples, 163 men and 152 women. The percentage of household was wives/husbands 27.9% and children 37.5%. The average of process suitability was 90.1% in Pangkep and 70% in Bantaeng. The suitability of process validation was such as visiting time 86.6%, respondent problems in the location 85%, interview process 77%, interview style and attitude 80.75%, interview ability 88.45%, water and salt sample 64%, household information 84.35%, health service access 88.1%, understanding of generic medicine 56.6% and environmental health 81.7%. While the suitability of content or result was such as body weigh and body length 91.7 %, upper arm circumference (UAC) 80.5%, measurement of abdominal circumference 77.8%, measurement of blood tension 77.8%, eyes check 83.1% and measurement THT 78.7%.

Conclusion, overall suitability of content in Pangkep average 75.65% and in Bantaeng 85.1%. Are suggested for the government results of this validation can be used as a reference and consideration in order to take health development policy and as comparison of result Basic of Indonesian Health Research regency.
Evaluation On Implementation Of Diarrhea's Integrated Management Of Childhood Illness In Children Under Five In Sumbersari Health Center, Bandung

Eka Nurhayati
Asti Nuriati, Eka Nurhayati
Medicine Faculty, Bandung Islamic University
Indonesia
nurhayatieka1@gmail.com

Diarrhea is one of the most common causes of death in children under five years. Prevalence of diarrhea in Indonesia is still high. Indonesia Health Ministry had issued Integrated Management of Childhood Illness (IMCI) to treat every children under five who suffered any kind of illness, including diarrhea. The prevalence of diarrhea in children under five in Sumbersari Health Center in July until September 2014 were 769 cases. From this total, only 475 children who had treated using IMCI.

The aim of this research was to evaluate the implementation of integrated management of childhood illness (IMCI) to treat diarrhea in children under five in Sumbersari Health Center.

This research was a qualitative research. The analysis was done using Evaluation of Implementation Simple Model. Data collection was done by depth interviews and observations. Informants in this research were three people, which are the heads of the health center, the personnel who managed IMCI, and the personnel who managed Health of Mother and Children and Family Planning Program in Sumbersari health center.

Evaluation of Implementation Simple Model was done to evaluate diarrheas IMCI implementation by evaluating the appropriateness of method, goal, competence, resource and environment. The result of the research showed that the implementation of diarrheas IMCI in Sumbersari Health Center was not implemented well. This result showed that there was lack of facilities and lack of trained health workers. Facilities like particular room for IMCI and Medical Advices Card for Parents were not provided by The Health District. Fund was also a big problem faced by Sumbersari Health Center. The Health Workers did not trained well because The Health District did not provide many Training and Education about IMCI. These things influenced the method of diarrheas IMCI that was run by Sumbersari Health Center. With all these limitations, not all children under five who suffered diarrhea could be treated using IMCI properly.
Evaluation On The Implementation Of Policies Toward Obesity Prevention Among School Children In Malaysia

Maznah Dahlui
Camelina Chan; Moy Foong Ming; Maznah Dahlui
University of Malaya
Malaysia
camelinachan@gmail.com

Childhood obesity is on the rise in Malaysia despite the available health policies and guidelines being introduced by the policy makers. This is an evidence based study of the existing health policies and guidelines that are related to obesity prevention among school children in Malaysia.

The study is to determine the status and the factors that can acts as barriers to and facilitators of the implementations of obesity prevention policies among school children.

This is a mixed qualitative and quantitative study conducted in July 2013 till February 2015 in all the primary schools in Selangor, Malaysia. In-depth interviews (IDI) were conducted among policymakers, school health teams, school administrators and school canteen operators. Using the findings from the IDI, a survey form was developed and distributed to 641 primary school administrators, to determine the status of implementation regarding policy dissemination, policy adoption and enforcement. Focus coding analysis was used for the qualitative data. The survey data were analyzed using SPSS software applying Chi-square test analysis to show the prevalence and associated factors. The study received ethic approval from UMMC and permission from Ministry of Education.

There are currently six policies that were being implemented among school children in Malaysia. The policies and guidelines are (1) Policy 1 Sport 1 Student, (2) Guideline in weight management of school children BMI measurement twice a year, (3) Guidelines for Food and Drinks Sold at the School Canteen, (4) Banning the sale of food and beverages by mobile vendors outside of school perimeters, (5) School Health Promotion Young Doctors Programme and (6) School Health Service Immunization and Medical Examination. Result from IDI showed that the current policies and guidelines was communicated from the top level down. The implementation status showed that policy dissemination, policy adoption and mechanism of enforcement of the existing policies were at least 91.7%, 65.6% and 33.3% respectively. Several factors were seen as barriers to the implementation of current policies and guideline which include attitude towards the existing policies, role conflict, lack of accountability mechanism, parents perception and belief and lack of resources. Commonly cited factors positively on the implementation includes the sufficient training provided from the top level, how the existing guidelines serve as a good reference to provide healthier meals to the school children.

The evaluation of policy implementation in this study did not take into account the specific content of the policy, however the findings were still relevant to the policymakers. Addressing the key issues will improve the effectiveness of the existing policies and guidelines in curbing obesity among school children.
Expression Survivin Protein On Laryngeal Squamous Cell Carcinoma And Its Correlation With Various Clinicopathology Factors At Dr. Sardjito Hospital, Jogjakarta, Indonesia

Lisa Novianti  
*Lisa Novianti; Agus Surono*  
Faculty of Medicine, Universitas Gadjah Mada  
Indonesia  
lisa.novi@mail.ugm.ac.id

Squamous cell carcinoma of the larynx (SCCL) is the second frequent incidence malignancy of all head and neck cancer. Protein play a role in anomaly of apoptosis and cell cycle. Survivin play an important role on the incidence and progression of malignancy by inhibiting apoptosis thereby increasing the survival and proliferation of mutant cells.

This research was conducted to determine relationship between the percentage of survivin expression in tumor tissue SCCL with clinical stage and various clinicopathologic factors (sex, age, tumor location, and histopathological grade).

This study used 29 samples taken from biopsies of laryngeal squamous cell carcinoma patients who came to the dr. Sardjito Hospital from year 2012-2013. Design of the study was cross-sectional design in THT-KL department, anatomical pathology of medical faculty Universitas Gadjah Mada, and anatomical pathology of dr. Sardjito Hospital. Sampel were stained by immunohistochemistry methods using a monoclonal antibody anti-survivin. Expression of survivin positive looks brown on the cytoplasm or nucleic membrane tumor cells. Statistical analysis using chi-square to compare categorical data.

Survivin expression was positive in 12 samples SCCL (41%) of the 29 total samples. Survivin expression showed a statistically significant correlation with the degree differentiation (p <0.5), with highest survivin expression in moderate differentiation. The expression of Survivin is the most common in late clinical stage (93.1%), but no statistically significant relationship. The conclusion of this study is expression of survivin has a significant relationship with worsening degrees of differentiation. Expression of survivin more often found in late stage SCCL than early stage.
Factors Affecting Patient`s Adherence To Insulin In Alwazarat Health Center, Riyadh, Kingdom Of Saudi Arabia

Mohammed Aljulifi
Mohammed Aljulifi; Umar Yagoub Mohammed.
Prince Sultan Military Medical City
Saudi Arabia
mzm428@gmail.com

Diabetes Mellitus (DM) is a common chronic disease in Saudi Arabia with most patients depending on insulin therapy. Adherence to treatment is a crucial and multifactorial element depending on controlling the disease and preventing the development of resistant, cross resistant and treatment. This study aimed at determining the adherence level to Insulin therapy and factors affecting in Riyadh, KSA.

This cross sectional study was conducted between December 2014 and July 2015 in Al-wazarat health center in Riyadh. A total of 106 diabetic patients who made the inclusion criteria completed the self-administrated questionnaire which contains Morisky Medication Adherence Scale (MMAS-8-Item) to assess the level of adherence. Collected data was entered into SPSS software for windows, cleaned and managed before analysis. Frequencies and percentages were calculated and chi-square was used to determine the association between adherence level and factors affecting it.

A total of (40 or 44.4%) female and (50 or 55.6%) were male. According to MMAS-8, 23 (25.6%), 36 (40%), 31 (34.4) were, highly adherent, moderately adherent and low adherent to insulin respectively. There is no significant association between adherence and socioeconomic characteristics or HbA1C percentages. There are some factors have significant association (p< 0.05) with low and moderate adherence such as being away from home, busy with other things, forgetfulness, using many medications, want to avoid hypoglycemia, change in daily routine and if skipping meals.

Conclusion: Adherence to medication, in general and Insulin specifically need to be assessed in different ways to determine the exact determinants. Health education, promotion on this issue and urgent prospective study on adherence level and its determinant is highly recommended.
Factors Affecting Quality Of Life Of Mothers Rearing The Infant Commuting To A Development Support Center

Takayuki Nishii
Takayuki Nishii; Kazuko Yamada; Ikuharu Morioka
Wakayama Medical University
Japan
moriokai@wakayama-med.ac.jp

In Japan, Act on Support for Persons with Development Disabilities has drawn increasing attention to development disability as well as mental handicap. The development disability is difficulty to be recognized from the appearance. Thus, those who are rearing the child suffering the development disability are putting effort to the child-rearing with a feeling of isolation and anxiety.

Judging from the earlier reports, the quality of life (QOL) of mothers with a disabled child was low. However, the reports from Japan are not enough and it is still unclear the QOL conditions of the mothers who are rearing a disabled child and the factors related to them. Because the QOL of mothers are related to the one of the child, it is also important through the position of the child to clarify the factors related to the QOL of mothers.

The aim of this study was to clarify the factors affecting the QOL of mothers who are rearing the infant commuting to a development support center. These results will enable us to make the better support to a mother who is rearing a child suffering the development disability.

The subjects were 249 (valid rate 52.0%) mothers rearing the infant commuting to a development support center in Wakayama Prefecture, Japan. This study was approved by the Ethical Committee of Wakayama Medical University. The anonymous questionnaire survey was performed in March, 2013. A self-administered questionnaire comprised of three parts. Part 1 was for the mother and included attributes, QOL, lifestyles, conditions of child-rearing and supports from family and so on. Part 2 was for the child and included conditions of commuting to a development support center, and characteristics of lifestyles, development and activities. Part 3 was for the father and families. The QOL was evaluated using WHOQOL26. This comprises 26 items. Higher total points of WHOQOL26 denote higher QOL. The answers to the question item were divided into two categories. The mean values of total points of WHOQOL26 were calculated by each category. When there was a significant difference in the mean values by the t test, the item was selected as an independent variable for next analysis. To find the factors related to the QOL, the Quantification type I was performed using 41 items that showed significant difference in the total points of WHOQOL26 by categories as independent variables, and the total points of WHOQOL26 as dependent variables.

A p value <0.05 was considered to indicate statistical significance. All statistical analyses were performed using the SPSS ver. 17 software. The mean age of the mothers was 36.0 years. The one of the fathers was 37.2 years. The one of the children was 49.5 months.

Average of the total points of WHOQOL26 was 82.7. This average was lower than that of general woman. This may result from the fact that the mothers in this study are rearing the child commuting to a development support center.
The Quantification type I analysis showed that 8 factors were related to the total points of WHOQOL26. They were: being tired at waking up in the morning (category weight -8.2), not feeling comprehensibility on the thinking of infant (-9.1), increased concern on child-rearing at present comparing with one before commuting (-5.6), not feeling concurrence on families' philosophy in child-rearing (-6.4), having no one to connect emotionally except her husband (-6.4), being tired from daily housekeeping and child-rearing (-6.4), concern on sleeping rhythm and hours of the infant since before commuting (-3.8), and not feeling that her husband would take care of the infant and keeping up with the housework when she would become sick (-5.0) (R2=0.408).

The QOL of mothers will be affected by the following factors. 1) Increased physical fatigue because of the insufficient sleep and rest, and the limited leisure activities; 2) Increased mental fatigue because of difficulty in comprehensibility on the thinking of infant, and the increased anxiety of child-rearing; 3) Weak family support because of no concurrence on families' philosophy in child-rearing, no one to connect emotionally except her husband and no help from her husband at the time of illness.

To improve the QOL of the mother, social supports, to reduce the tiredness (such as respite service), to facilitate families understanding the thinking of infant, and to enable the husband to support the mother, are important.
Factors Associated With Menarche Status Among Students In SMPN 10 Tegal

Adila Prabasiwi
Adila Prabasiwi
Politeknik Harapan Bersama Tegal
Indonesia
adilaprabasiwi@gmail.com

Over the last 100 years, the average age at menarche decreases as girls are likely to experience menstruation earlier. The earlier a girl's age at menarche, the attention is required. Young girls in the midst of puberty experience growth spurt in which the need of adequate nutrition is imperative to her wellbeing. Once a girl first begins to menstruate, her need of iron also increases. To lower the risk of getting anemic, iron (Fe) intake should be taken into consideration in order to prevent anemia.

The objective of this study was to identify the association between nutritional status, body fat percentage, maternal age at menarche, socio-economic status, and external stimuli to menarche status.

A cross-sectional study design was used to collect data. This study was conducted on May 2011 with 204 (first and second year junior high school student) students from years VII and VIII (age 11-15) at SMP N 10 Tegal. The analysis used in this study is the bivariate analysis with chi square test. Status menarche, age at menarche, external stimuli are found in the questionnaire that is filled out by the students with guidance from researcher. Parental data are also required; they include social-economic data (education and income) and maternal age at menarche. Parents fill out their own set of questions in a separate questionnaire. Nutritional status used in this study is the BMI/Age for children 5-18 years. Data is acquired from the measurement of students weight and height. The weight is measured by a digital scale with a precision of 0.1 kg. The height is measured by microtoice with a precision of 0.1 cm. The measurements are taken two times. Body fat percentage is measured by Bioelectrical Impedance Analysis (BIA).

The result shows that 78.9% of respondents had attained menarche with an average age of 12.24 ± 0.954 years. Variables nutritional status (0.001), body fat percentage (0.001), and maternal age at menarche (0.002) are significantly related to menarche status. The author suggests school and the Department of Health to monitor nutritional status of students. For prevention, monitoring should be done in the elementary school. We can prevent obesity that can trigger early menarche, and also prevent underweight that can cause late menarche.
The Health Office of East Java Province obliges private midwives to fill a provided form and report it to a health center every month. The report consists of the following indicators: number of first and fourth visit on pregnant women group, number of labour, number of postpartum, number of lifebirth and deadbirth, number of new and old visit on children under five years group, number of immunization, number of mother and child who are referred, and number of family planning services. The result of recording and reporting could be used to value a health status and health degree at an area. By completing and submitting the report timely, data of maternal and child health status could be assessed and observed in accordance with a condition at that time and could be determined a priority for further action. Finally, each problem could be early detected and handled well. But it turns out that policy can not fully run in accordance with the procedure. The midwife is already aware of the policy but not fully perform well. In the execution of Midwives do not fill out the form with complete reporting and not reporting timely recording. Determine the factors associated with reporting and recording obedience of private midwife practice in maternal and neonatal services.

This was an observational research with survey method and cross-sectional approach. The research instrument used a structured questionnaire. Number of sample was ninety midwives. Data were analyzed quantitatively using the methods of univariate, bivariate, and multivariate analysis (Logistic Regression Test using software of SPSS version 13.

Research results showed most respondents have a service life of > 5 years (90.7 %), midwives have good knowledge about reporting and recording program (50.7 %), midwives have good motivation (52 %), midwives have the good perception about recording and reporting procedures (52 %), midwives have good perception about supervision (54.7 %), and they have perception that public health facilities provided inadequate (66.7 %). The conclusions from the analysis of the relationship p value < 0.05 indicates correlation between work period (p-value = 0.039), procedures (p-value = 0.030), and motivation (p-value = 0.0011) with obedience. Results of multivariate logistic regression analysis (p-value < 0.05) showed that the motivation (p-value = 0.0011) and procedure (p-value = 0.004) had an influence together to obedience of Midwives. The recommendation As a suggestion, Head of the Health Centers should complete facilities for improving the midwives motivation and for supporting the success of recording and reporting program regarding on maternal and child health.
Factors Of Waist Circumference In Hypertension Patient Age 30-65 Years At Puskesmas Bojonggede, Kabupaten Bogor, Jawa Barat, Indonesia

Sriyanti Wijayanti
Sriyanti Wijayati; Ratu Ayu Dewi Sartika
Universitas Indonesia
Indonesia
sriyantiwijayanti@yahoo.co.id

Waist circumference is a simple anthropometric measurement that observed visceral fat accumulation. In Indonesia, the prevalence of hypertension patient with waist circumference higher than cut-off points is 25%.

The purpose of this study is to know about waist circumference and factors associated with the waist circumference in hypertension patient at Puskesmas Bojonggede, Kabupaten Bogor, Jawa Barat.

This research used cross-sectional study with purposive sampling. The subjects of this study was 105 hypertension patients aged 30 years who regularly went to health center for 3 consecutive months.

The result showed there were 67% of respondents who has risk waist circumference (68.5% in woman, and 56.2% in men). From the research, there is statistically significant association between obesity genetic history, energy intake, fat intake, carbohydrate intake, and body mass index with waist circumference in hypertension patient. Its necessary to disseminate about the importance of measuring waist circumference, often do waist circumference measurement, and implement nutrition balance to prevent complication on hypertension patients.
Factors Related To Community Participation In Posyandu Programs In Kinovaro Sub-District, Central Sulawesi Indonesia

Nikmah Utami Dewi

Nurdin Rahaman; Nikmah Utami Dewi; Dede Prima Ramadhannisa

Public Health Study Program, Tadulako University, Indonesia

ndewi_2002@yahoo.com

Under-five children weight measurement which is done every month in posyandu is a vital health and growth monitoring activity. Growth faltering can be early detected by regular weight measurement thus severely underweight can be prevented. Children weight measurement scope (D/S) is an indicator related to community participation in posyandu programs. In Central Sulawesi, the Percentage of children under-five those being weighted in posyandu are less than target.

This research aimed to find out the factors related to community participation in posyandu programs in Kinovaro sub-district working area.

Analytical research with a cross sectional approach was used in this research. 91 women with children under-five were taken as sample by purposive sampling technique. The research result was statistically tested with binary logistic regression to analyze the association between some potential factors with community participation in posyandu programs.

Job ($P = 0.022$), family support ($P = 0.039$), cadre activeness ($P = 0.007$) and program benefits ($P = 0.020$) but not education ($P = 0.674$) and duration of stay ($P = 0.308$) are statistically associated with community participation in posyandu programs after controlling for other factors. The counseling of the importance of posyandu to improve community participation in posyandu programs especially for the family members is crucial.
Factors Related To Obedience Of Smoker Toward The Non-Smoking Area (NSA) Policy In The Sultan Hasanuddin International Airport 2015

Fairus Prihatin Idris
Nurwidya; Fairus Prihatin Idris
Universitas Muslim Indonesia
Indonesia
fairus.p.idris@gmail.com

The WHO has said that the mortality associated with cigarette smoke induced 5.4 million in 2004 could rise to 8.3 million by 2030, more than 70% of which occur in developing countries. Indonesia is one of the world's largest tobacco consumer. Smoking behavior of the population 15 years and older tended to increase from 34.2 percent 2007 to 36.3 per cent year 2013. In South Sulawesi prevalence of smokers increased from 25.5 % in the year 2007 to 31.6 % in 2010. In the city of Makassar, the number of smokers reach 287 300 people or 22.1 percent of the total population. Makassar City Government has issued Regulation No. 13 Makassar Mayor 2011 which regulates Smoking Area. The area is included in the non-smoking area is Sultan Hasanuddin International Airport. Based on the observation that there are violations of the passengers smoking outside smoking area room.

To determine the relationship of knowledge, attitudes, behaviors of smokers, provision smoking room, and the involvement of airport officer, with obedience toward the Non-Smoking Area (NSA) policy in the Sultan Hasanuddin International Airport 2015

This type of research is a quantitative study with a cross sectional design. The population in this study were all visitors at the Sultan Hasanuddin International Airport. Samples were taken by using sampling techniques with nonprobability accidental method, is sampling technique by accident, meaning that anyone who by chance/incidental met with the researchers can be used as a sample, if it is deemed the person who found it suitable as a data source. The entire population sampled to obtain as many as 43 respondents. Data collected by interviewing visitors were conducted by using questionnaires. Data management is done through a process of editing, coding, entry and cleaning data. Then the data were analyzed by using chi-square test and if p 0.05, the null hypothesis would be rejected. Furthermore, the data is processed and analyzed by using a computer and presented in table form that accompanied the narration.

The results showed all of respondents were male (100%) with obedience (55.8%). There are no significant relationship between smoker's knowledge (p=1.000 > 0.05), smoker's attitude (p=0.575 > 0.05), provision of smoking room (p=0.653>0.05), and involvement of airport’s officer (p=0.495>0.05) with the obedience to the policy of NSA in Sultan Hasanuddin International Airport. But there is a significant relationship between smoking behavior with obedience to the policy of NSA in Sultan Hasanuddin International Airport(p=0.027<0.05). To improve the obedience needed socialization about the implementation of NSA, repair of smoking room area, need to be established special internal supervision to overseeing the implementation to the policy of NSA in Sultan Hasanuddin International Airport, and written warning like smoking ban sign need to refurbished.
Factors Related To Pneumonia In The Elderly In Indonesia (Secondary Analysis Of Basic Health Research Data 2013)

Desri Maulina Sari
Desri Maulina Sari; Yovsyah; Tri Yunis Miko Wahyono
Universitas Indonesia
Indonesia
desridiamond@rocketmail.com

The elderly population is growing fast worldwide. It needed serious attention from all sides, both government and community. Especially to health problem, which is an infectious disease still causes deaths among elderly almost all over the world. Pneumonia is one of lower respiratory infectious disease that attacks this group. The prevalence of pneumonia in the elderly reach 5.04%. In addition, pneumonia placed in the third rank as caused of death in Indonesia after stroke and liver disease (Basic Health Research, 2007). Considering the high morbidity and mortality rates related to pneumonia in the elderly, it is important to find out factors associated to pneumonia in the elderly. So that the prevention strategies can be applied in the community.

The main objectives of this study were: (1) to determine the prevalence of pneumonia in the elderly in Indonesia; (2) to analyze factors related to pneumonia in the elderly.

A Cross-sectional study was applied for this study. This study using secondary data from basic health research 2013. Subjects consisted of 86.980 elderly in Indonesia, aged 60 years old. Sociodemographic data, behaviour factor, co-morbidities and other factors was analyzed from April to May 2015 using statistic software. We used a logistic regression models to determine the factors associated with pneumonia in the elderly.

The study showed that 7.9% elderly experiencing pneumonia, factors related to pneumonia among elderly in Indonesia were living in urban area, age 65 years old, females more risk than males, not getting married, having lower education, having smoking habit, lower physical activity, incorrect washing hand habit, poor dental and oral health, malnutrition, having coronary heart disease, diabetes melitus, and chronic obstructive pulmonary disease (COPD). The most dominant factor of pneumonia among elderly were COPD (OR=8.44 95%CI 7.82-9.12). To protect elderly from pneumonia disease, they are suggested to stop smoking, behaviour of healthy and clean is applied, procurement of oral and dental check up program monthly, and pneumonia vaccination for those before aged 60 years.
Factors Related To The Behavior Prevention Sexually Transmitted Infection (Stis) On Female Sex Workers (FSW) In Complex Meranon District Sintang 2014

Arip Ambulan Panjaitan
Ira Agustini; Arip Ambulan Panjaitan
Diponegoro University
Indonesia
arief.naburju92@gmail.com

Female Sex Workers (FSW) is one of a high risk infected population of HIV and AIDS. The low of FSW awereness in using condom. Prevent HIV and AIDS, FSW have to be consistent in condom using.

This research aims to know what related factors with the consistency of FSW in condom using to prevent STIs

This research used cross-sectional framework with sample of 74 FSW. Techniques of data collection using questionaries, data analysis using univariate and bivariate analysis using chi square statistical test.

Statistical test showed that there was a significant relationship between knowledge (p=0.021), attitude (p=0.001) and there was no significant relationship between education level (p=0.212) with behavior for STIs prevention. The improvement by health promotion program and the consistency of condom using will be more applicable effort.
Factors Related To VCT (Voluntary Counseling And Testing HIV) Among Prisoners At Pondok Bambu Prison Jakarta 2012

Ayu Indriyani Lestari
Ayu Indriyani Lestari
Universitas Indonesia
ayuindriyani.l@gmail.com

Drug-related criminal cases in Indonesia showed an increasing trend. In 2006 there were 17,355 cases; 2007 there were 22,630 cases; and in 2008 there were 29,359 cases throughout Indonesia (BNN, 2009). Sentinel surveillance on prisoners showed HIV prevalence in 2005 in Jakarta is 17.8% (Ditjen P2PL, 2006). Prevention of HIV infection in prisons and detention centers included in the area of prevention of the framework program of the National Strategy and Action Plan 2010-2014 of the KPAN. Target infection prevention and control programs in prisons and detention centers are 80% of inmates accessing prevention services available in prisons (KPAN, 2010). So, VCT participation among prisoner is crucial for prevention and care support treatment of HIV in prison.

The purpose of this study was to explore related factors to VCT among prisoner in Pondok Bambu Prison Jakarta 2012.

A cross sectional survey was conducted in Pondok Bambu Prison Jakarta. Population of this study is all prisoners who inhabit a special block for prisoners with drug cases. Data were collected from 95 prisoner which chosen by random sample, using self-administered questionnaires. Sample selected by using probability proportional to size (PPS), this technique is used because the number of prisoners from each block differently.

Only 28.4% of respondents had participating in VCT. Prevalence of VCT among inmates is lower compared to the target by KPAN on the National Strategy and Action Plan 2010 2014. KPAN targeted VCT can reach 80% of inmates. Based on the results of interviews with officers of the HIV program at the clinic, prisoners who came for VCT come from the recommendation of a doctor, not because awareness of prisoners. While participants who attend to VCT independently because she knows that she was a high risk person are very limited.

Type of criminal act have relation with VCT participation (p < 0.001, OR = 0.085, 95% CI = 0.019-0.387). According to the National AIDS Commission (2007), 73% of prisoners with criminal offenses are drug users, and 40% of them are IDUs. Detainees with criminal offenses drugs are more at risk for exposure to HIV. Because inmates in this group ever did use needles. Health worker can perform an initial assessment of the type of criminal offense committed by prisoners to assess exposure to HIV risk behavior. So that prisoners with drug cases can be targeted health promotion for VCT.

Significant results obtained between the level of knowledge about HIV and VCT VCT participation in the resistance (p = 0.049, OR = 2.898, 95% CI = 1.978 to 8.582). Good knowledge of VCT can affect a person's desire to visit the VCT clinic (Ying Wang et. al., 2010). Knowledge about HIV, modes of transmission, and prevention methods that will either make prisoners can assess risk behaviors ever
conducted, so that the prisoners would be aware whether to feel at risk of HIV. Feel at risk of HIV is one indication that a person aware that his behavior could cause her infected with HIV (MoH, 2010). This awareness will increase the motivation of a person to know their HIV status by doing VCT.

Medical workers support was an attempt by health workers to increase the participation of VCT in custody, support in the form of routine checks to prisoners, providing information about HIV and VCT during the visit to the prison clinic, and the recommendation to conduct VCT. Medical workers support showed a significant relationship with VCT participation among prisoners (p = 0.047, OR = 2.533, 95% CI = 1.997 to 6.436). The role of health workers in clinics to increase the participation of VCT in custody be a major factor influencing the participation of VCT. Clients who come for VCT majority comes from referral physicians of general clinic with opportunistic infections, high risk behavior, or IDUs history.

Meanwhile, there is no significant correlation between education, job status, STD record, perception of VCT service needs, prison support, friends/family support.
Factors That Influence Intention To Buy Of Health Insurance

Dwi Oktiana Irawati
Dwi Oktiana Irawati; Nurdin Sobari
TNP2K
Indonesia
ukiku27@yahoo.com

The Law number 24 year 2011 on Social Insurance Carrier has been enacted. In regards to this regulation, all Indonesian peoples are mandated to contribute to social health insurance starting January 1st, 2014. Previously, only workers in formal sector and civil servants are mandated in social health insurance. In 2011, the total number of people who have health insurance from different providers around 150 million program. BPJS challenges ahead in meeting the deadline for Universal Health Coverage 2019 is how to invite the rest of population to enroll and contribute continuously on the national health insurance. Although the cost of healthcare is increasingly expensive, but the awareness to have health insurance in Indonesia is still low. Until now, new participants of BPJS still dominated by those who have already suffered severe pain. Further challenge is that the majority of labors are in the informal sector.

Facts show that health insurance coverage will reduce the number of Out of Pocket. Study of the ILO found that the willingness to pay of the informal sector is actually higher, yet his ability is not so high because of the uncertainty of income. Another study explained that "... while cost is a primary factor, there are other, unknown factors that Contribute to uninsurance." (Murray, 2004). Therefore, this study aims to determine the factors that affect the motivation of individuals to purchase health insurance by using a Health Belief Model and the Theory of Planned Behaviour.

Conclusive Research Design with the type of research is Descriptive research and use single-cross sectional designs in which the sample was selected and measure one time. Linear regression to test the hypotheses. Informal sector surrounding Universitas Indonesia that is Kukusan Kelurahan, Pondok Cina, Beji Timur. The sampling technique used is nonprobability sampling, approach technique is convenience sampling. The number of samples is 180. Reliability test for each construct using Cronbach's alpha test. Validity test for each construct using factor analysis. Multiple regression test to determine the association between variables. Finally, descriptive analysis to explain managerial implications.

This study uses the Health Belief Model and the Theory of Planned Behaviour. The construct used as predictor of intention to buy are perceived susceptibility (Health Belief Model), perceived benefits (Health Belief Model), and perceived behavioral control (Theory of Planned Behaviour). This study defines the attributes as follow: financial risks, health risks, access to the utilization of insurance benefit package, premium prices, access of premium purchases, and individual characteristics.

The study found that variables directly attributed to the intention to buy health insurance are 1) perceived benefit and perceived behavioural control. Education also positively correlated with the intention to buy health insurance. However, perceived susceptibility that were hypothesized to influence the intention to buy health insurance were not significant.
The main factors from Perceived Benefit that influenced respondents to buy health insurance is benefit package and access to utilization. Health insurance ideally cover the outpatient, inpatient, operation, and easy in handling claims.

The next factor that supports the purchase motivation is Perceived behavioral control that measures the easiness of consumers to purchases. In the perception of respondents, the availability of procedure to utilize the insurance, various methods of purchase and monthly payment methods, as well as easy to use the health insurance is the most important factors that motivate them to buy.

The factors that do not affect the purchase motivation is perceived susceptibility, ie the perception of health risks and financial risks as a result of an illness. Another factor that does not motivate the purchase is the price premium, ages and levels of household expenditure.

Overall, the study concluded factors that influence the purchase intention to buy of health insurance among informal sector in urban areas is benefits package, access to insurance utilization, and access to purchase.

National Health Insurance that has launched in January 2014 offered full benefit packages that covered all illness, drugs and operation as long as they follow the procedures. Therefore there is no obstacles from informal sector to join. The problem that still exist until recently is the procedure to enroll as member and monthly payment mechanism. In the some BPJS branch, queueing problems is still exist. Though BPJS has facilitate to enroll by e-registration, not every person has internet access. They still choose come and enroll physically than virtually. The limited branch then is an issues. In the other hand, in urban area, now is common to pay the monthly bill by debit or credit. Unfortunately, BPJS still has no option except pay regularly by ATM. It would be a good step if BPJS provide several payments mechanism to informal workers.
Family Income And Expenditure Are Associated With Household Food Security Status Among HIV/Aids Patients

Siti R Nadhiroh  
Ruri A Claudia; Siti R Nadhiroh; Erwin A Triyono  
Universitas Airlangga  
Indonesia  
sitinadhiroh@fkm.unair.ac.id

Household food security and HIV/AIDS are intertwined in a vicious cycle that increases vulnerability and worsens the severity of each condition. HIV infection can also lead to malnutrition through a reduction in food intake. It could be caused by the lack of food access as the one aspect of household food security.

The purpose of this study was to analyze the association factors of household food security status among HIV/AIDS patients. This cross-sectional study was done at Intermediate Infectious Disease Care Unit Dr. Soetomo General Hospital Surabaya on April until May 2014. 33 HIV/AIDS patients/households were selected using simple random sampling technique. The data were collected through interview using questionnaires.

The results showed that most of the households were food insecure (60.6%), which consisted of 33.3% of food insecurity without hunger, 24.2% of food insecurity with moderate hunger and 3.1% of food insecurity with severe hunger. Moreover, there was an association between family income (p=0.047) and family expenditure (p=0.030) and household food security. Conversely, there were no correlation between economic access (p=0.398), physical access (p=0.742), food availability (p=0.084), food or financial assistance (p=0.633) and household food security among people living with HIV/AIDS. The conclusion is that family income and family expenditure are associated with household food security among HIV/AIDS patients. A specific and regular monitoring by government and non-governmental organizations need to be addressed for HIV/AIDS patients with households food insecurity.
Fat Intake And The Risk Of Metabolic Syndrome In Adolescents

Yenny Moviana, MND
Yenny Moviana, MND; Lely Cintari, MPH; I Putu Suiraoka, MKes
(1) Politeknik Kesehatan Kemenkes Bandung Jurusan Gizi, (2) Politeknik Kesehatan Kemenkes Denpasar Jurusan Gizi
Indonesia
ymoviana@gmail.com

Obesity is the major risk of chronic diseases and play a central role of metabolic syndrome. In the 2020 WHO estimate chronic diseases would cause 75% mortality in developing countries. The incidence of obesity in children in developing countries, such as Indonesia, increased. Obesity prevalence in adolescence age 13-15 in Indonesia was 2.5%, but Bali was greater than national i.e 3.1%. Some studies showed there were strong relations between overweight, obesity and metabolic syndrome in adolescence. Central adipose changing in adolescence is a significant predictor to LDL-cholesterol, blood pressure and insulin resistant. Obesity in adolescence as a metabolic syndrome component, has a permanent risk of obesity in adult with some effects, such as DM and cardiovascular diseases. Fat gives more calories to total energy than other nutrients. Fat also gives more flavor to food that make adolescents choose food high in fat.

This study was examined the Odd Ratio between fat intakes and the risk of metabolic syndrome in adolescence in Denpasar. The study was observed systolic and diastolic blood pressures and random blood glucose.

This was retrospective case control study designed. Participants were junior high school students from 8 schools (private and government) in Denpasar. Cases were subjects who had waist circumferences 80 cm for girls and 90 cm for boys. Controls were subjects who had waist circumferences <80 cm for girls and <90 cm for boys. There were 256 subjects, 128 cases and 128 controls, aged 11-15 y.o. Data were collected on 23 August to 14 October 2014. Ethical by Ethic Commision of Udayana University Bali. Waist circumferences were measured using Roche waist circumference meter. Fat intakes were collected by semi quantitative food frequency method. The data were analyzed by Nutri Survey to get the percentage of fat intakes by age compared to Indonesia Recommended Dietary Intakes (AKG, 2013). Fat intakes 25% total energy were categorized acceptable, and >25% were non acceptable. Systolic and diastolic blood pressures were measured using Omron meter. Systolic 130 mm/Hg and/or diastolic 85 mmHg were used to determine hypertension in adolescence (Rizzo et al., 2013). Randomed blood glucose level >140 mg/dL was used to determine the possibility of impaired glucose tolerance. Fat intakes, waist circumference, systolic and diastolic blood pressures, randomed blood glucose levels were analyzed statistically to get the Odd Ratio. Parents overweight status and sample activity also collected.

There were more boys dan girls in case group, i.e. 65.6% and 34.4% respectively. It may because fat girls were ashamed to be participants in this study. All samples said healthy. Some of case group (26%) had overweight parents. Almost all samples exercised routinely in school once a week. Mostly said not routinely exercise. Gadget and computer more interesting for them especially case group. Fat intakes, systolic and diastolic blood pressures, randomed blood glucose levels were higher in case.
group than control. Acceptable fat intake in control group higher than case group, 78.9% and 53.1% respectively. And, not acceptable fat intake in control group were lower than case group, 21.1% and 46.9% respectively.

Statistic test showed OR 3.3 (95% CI 1.907-5.712, p = 0.001). Fat intakes more than 25% total energy was cross-sectionally associated with greater risk of risk metabolic syndrome inadolescences. Stratified statistic test showed OR 3.985 (95% CI = 1.956 - 8.120; p < 0.001). Fat intakes more than 25% total energy was cross-sectionally associated with greater risk of risk metabolic syndrome in male adolescents.

This research only analized fat intake. Some samples in case group had acceptable fat intake or 25% total energy per day. It may assume that carbohydrates also play role in giving excessing energy. Not acceptable fat intake were contributed by fast food and fried food. These kind of food were easily find in school canteen or around, or on weekend with family.

Denova-Gutierrez et.al (2010) concluded that diet contained soft drinks, refined grains, corn tortillas, pastries, seafood dan whole grains (high fat and simple carbohydrates associated to the risk of metabolic syndrome. Frequent in consuming fried food significant correlated to the incidence of DMT2 and artery coronary diseases, and associated to weight gain and comorbid to hypertension and hypercholesterolemia (Cahill et.al, 2014).

This study showed more cases were hypertension than control. The highest sistolic and diastolic blood pressures were on case group. Brummet et.al (2011) reported that blood pressure increased as waist circumference increased in black girls. In boys, the blood pressure influenced by body mass index (Novianingsih, 2011). Tybor et.al (2011) added that visceral fat (abdomen) positively correlated to the risk of cardiovascular diseases in children and adolescence.

There were 6 samples had randomed blood glucose >140 mg/dL, 4 cases and 2 controls in this study. Sargowo and Andarini (2011) showed there were no differences on fasting blood glucose and 2 hour Post Prandial blood glucose levels between metabolic syndrome and non metabolic syndrome adolescents in Malang. They explained that this because adolescence age can compensate hyperglycemia condition, where pancreas will increase insulin secretion to make plasma glucose normal.

In term of activity, Steinberger et.al (2009) concluded that sedentary were positively correlated to overweight in children and adult. They added that physically active gave benefit to weight manajemen and prevented to weight gain. Increased activity correlated also to insulin sensitivity in adolescence. Behaviour modification is an approach to decrease body weight, increase physical activity and diet modification (Crocker and Yanovski, 2009).
Feasibility Of Self-Sampling For HPV-DNA Testing Among Malaysian Women

Tin Tin Su
Tin Tin Su; Yut-Lin Wong; Si Lay Khaing; Karen Morgan
University of Malaya
Malaysia
tstin@ummc.edu.my

Cervical cancer is the second most common cancer in women in Malaysia, and ranks 5th out of 11 South-East Asian countries in cervical cancer incidence. It is reported that 85% of all cervical cancer related deaths were from developing countries. Cervical cancer is the 4th leading cause of cancer death among women in Malaysia. Cervical cancer incidence peaks in relatively young women (40-50 years), resulting in a significant loss of life-years. A relatively high cervical cancer incidence reflects inadequate early detection through screening. The National Health and Morbidity Survey (NHMS 2011) reported that less than 25% of the 18-69 year old women in Malaysia have had a Pap smear screen, despite an on-going national Pap smear screening program implemented for more than thirty years. An alternative strategy of primary screening using vaginal self-collected samples which are tested for the presence of high risk HPV genotypes (HR-HPV) has been shown to detect high grade cervical neoplasia and cancer as well.

The objective of the study is to explore the feasibility of self-sampling for HPV-DNA testing among Malaysian women

A cross sectional qualitative study was conducted from September 2014 to April 2015. Purposive sampling was used to select key informants from both public and private sector. The key informants are policymakers, gynaecologists, pathologists, medical officers, general practitioners, an officer from Pos Malaysia, and supplier of self-sampling kit. Altogether, fourteen in-depth interviews were conducted with selected key informants. The interviews were digitally recorded, transcribed verbatim, managed and analyzed using the NVIVO Version 9.

Among participants 8 were from the public sector and 6 were from the private sector. Their working experience ranged from 2 years to 38 years.

Generally, all key informants agreed that the current cervical cancer screening program in Malaysia has been found to be unsuccessful in terms of Pap smear coverage, cervical cancer incidence and mortality. This is due to poor acceptance by women which in turn is influenced by cultural sensitivity and long waiting time in the clinic. Since opportunistic screening is currently still practised in Malaysia, the commitment of health care providers to encourage women to do Pap smear screening is crucial. Overcrowded situation in clinics and limited facility also impede Pap test screening for all eligible women who attended the clinic.

Thus, majority felt that HPV-DNA testing by using self-sampling kit has some promising possibilities to overcome the current constraints among both providers and users. Healthcare professionals in the public sector, in particular, were supportive that this new approach could be another option for users who might not undertake the Pap test. However, there should be proper training for women
to use the self-sampling kit accurately. Many pointed out that the cost of self-sampling kit and laboratory test would be other challenges since the new screening test is 3 to 4 time more expensive than Pap test. However, local production of test kit would reduce the cost. Availability of trained laboratory technician would be an issue especially for public health care facilities, a concern reported by key informants in the public sector.

Our findings concluded that HPV-DNA testing of vaginal self-collected samples as an alternative approach is feasible and acceptable by women and health care professionals for cervical cancer early detection and prevention in Malaysia. However, policy makers willingness to invest a substantial resource is crucial for the establishment and success of the new programme.
Fitness On Students Of School For Athletes Ragunan Jakarta

Trini Sudiarti  
*Mison Maryanto Rante ; Trini Sudiarti*  
Faculty of Public Health Universitas Indonesia  
Indonesia  
trini@ui.ac.id

Fitness of the body ability to perform tasks and daily work diligently, without experiencing significant fatigue while improving the health status not susceptible to disease. Fitness is cardiorespiratory reference of someone. VO2 max as an indicator the levels of fitness. Low levels of fitness on adolescents athletes in Indonesia for conducting this research.

The study aims to determine the dominant factor estimated VO2max value of School for Athletes Ragunan Jakarta student's.

This study used cross sectional design and conducted on 110 students of School for Athletes Ragunan Jakarta. Estimated VO2max obtained by indirect measurement method using Balke 15 minutes test. Multivariate analysis with multiple linear regression models to obtain the predictive value of VO2max.

The result showed that average value of the estimated VO2max of male students (47.33+/- 4.29 ml/kg/min) is higher than female students (40.97+/-4.54 ml/kg/min). Variables that have a statistically significant relation with estimated VO2max value on this study were gender, nutritional status (Z-score BMI-for-age and percent body fat), vitamin B2 intake, and physical activity. Dominant factor in determining the value of the estimated VO2max in this study is a physical activity. The models to obtain the predictive value of VO2max = 33.78 + (6.31 x gender) - (1.52 x Z-score BMI-for - age) + (2.73 x physical activity).

Good nutritional status, and regular physical activity required to achieve a good VO2max value.
Frequency And Determinant Of Stroke In Adult Hypertensive Patient In Rural Area (Further Analysis Of Riskesdas 2013)

Annissa Ika Putri
Annissa Ika Putri; Nasrin Kodim; Krisnawati Bantas
Pusat Riset Epidemiologi dan Surveillans FKM UI
Indonesia
annisa.ika@gmail.com

Stroke was recorded as the second-highest mortality cause at the age of 45-54 years in rural areas of Indonesia. Stroke is multi causal brain function disorder due to vascular abnormalities.

This study aimed to determine the frequency and determinants of stroke based on risk factors in hypertensive patients aged 45 years in rural areas of Indonesia.

This study is a further analysis of the Riskesdas 2013 data which used cross-sectional study design. The sample of this study is hypertensive patients who aged 45 years old and lived in rural areas.

The results of this study showed that the prevalence of stroke in adult hypertensive patients in rural areas amounted to 5.3%. The highest prevalence of stroke was found in North Maluku province (7.2%) and the lowest in Papua province (1.7%). In the studied variables, gender, stress, physical activity, consumption of anti-hypertensive drugs, smoking and education have relation to the prevalence of stroke in adult hypertensive patients (45 years) in rural areas of Indonesia.
From Integrated Medical Care To Population Health In New Taipei City

Shan-Chi Pai  
Kuan-Hsien Chen; Shan-Chi Pai; Shu-Chen Kao; Chi-Hung Lin  
Department of Health, New Taipei City Government  
Taiwan (R.O.C.)  
AI3533@ntpc.gov.tw

New Taipei City is not only a vast territory city but also the largest population city in Taiwan. Based on medical care resources, it can be classify to urban, suburban, rural, and highly-rural.

Because of rapid population aging and major shifts in health care, medical resource integration models of the city should be established immediately to enhance the quality of medical care and lifestyle.

The health care system should be designed to maximize value through current resources. For instance, through the cooperation with six major hospital in New Taipei City (Far Eastern Memorial Hospital, Shuang Ho Hospital, Cardinal Tien Hospital, Taipei Tzu Chi Hospital, MacKay Memorial Hospital Danshui Branch, and Sijih Cathay General Hospital), hospitals have been set up their own hospital alliance. Hospital alliance provides Green Path service to accelerate the time of medical referral.

As well as connecting to academic medical centers metropolitan hospitals, local community hospitals, primary clinics and long-term care institutions, the project can establish medical resource integration models to solve the problem of over-crowdedness in some hospitals. Hence, the model can improve peoples health and be both sustainable and actively contributes to our city.
Glyphosate is the most widely used herbicide in Thailand. People exposed to glyphosate herbicide can develop eye and dermal irritation, oral or nasal irritation, nausea, headache. Pregnant women who were exposed to glyphosate before conception had elevated risks of late abortion.

The objective is to measure glyphosate concentrations in maternal and umbilical cord serums during the normal delivery of pregnant women living in agricultural areas in Thailand.

During their 7th month of pregnancy, the women were interviewed about their general health, and work exposures including agricultural work, as well as about use of pesticides at home and work. The maternal (n=82) and umbilical cord serum (n=75) was collected during delivery by the delivery nurses and was frozen at -45°C until analysis. The serum sample was analyzed using high performance liquid chromatography with fluorescence detector.

The (median, range) glyphosate concentrations in the serum of the pregnant women (17.45, 0.2-189.08) ng/ml) were higher than those in the umbilical cord serum (0.2, 0.2-94.93). The factors that were significant in predicting higher glyphosate exposure in pregnant women were agricultural occupation, living near agricultural areas, having farm family members, visiting agricultural fields during pregnancy and growing plants.

The glyphosate herbicide could be transferred from maternal to their newborns and be affected on newborns health.
Gouty Arthritis: Eat My Joint Cease My Income

Nadia Mohd Mustafah
Nadia Mohd Mustafah; Nor Faridah Ahmad Roslan; Norasikin Ab Azis; Kavitha Ratnalingam
Faculty of Medicine, Universiti Teknologi MARA
Malaysia
drnadm@yahoo.com

Gout is an inflammatory arthritis due to disorder of urate metabolism which is common in men more than 40 years of age (1). Many patients seek treatment during acute flare and not having proper treatment following that. The consequences of gout were thought minor until recently as it causes economic burden not only to patients but also to the country.

To explore consequences of gout in young person

We described two cases of young men in their early 30's who is a husband, father and sole breadwinner who presented with disability following gouty arthritis. Both were diagnosed in their 20's but never referred to rheumatologist or had regular follow up despite having frequent flare. The disease had cause joints contracture and inability to perform fine movement and walking. As a result of their disability and frequent medical leave, one man is awaiting job termination and the other is terminated from his job.

Gouty arthritis is associated with increase in economic burden not only to the patients but to the country as it cause permanent and long term disability. Therefore, we should strategies in early prevention in the community, increase awareness of adherence to long term treatment and follow up and improve awareness of the primary care doctors in managing the disease better.
Health Financing In Indonesia, Perspective Study On Source And Owner Of Health Insurance

Nisa Kamila, SE  
Galih Permana, SE ; Nisa Kamila, SE ; Rina Wahyu Wijayani, SE  
Universitas Indonesia  
Indonesia  
nisakamila07@gmail.com

Health financing in Indonesia still be the main factor for developing public health. Low budget for health financing by government compared to other program or other sector beside public health can obstruct achieving targets of MDGs 2015. Also awareness of health insurance is still low, it reflect on minimum people in Indonesia who has health insurance for themselves or their family.

This study want to show description of Government Health Financing in Indonesia by analyzing source and owner of Health insurance. This study want to show description of Government Health Financing in Indonesia by analyzing source and owner of Health insurance.

This study used descriptive analysis with retrospective approach and used secondary data from RISKESDAS 2013, Indonesia Health Profile 2013, APBN 2014.

This study conclude that most of family in Indonesia still pay for the health service with their own money (Out of pocket). But for the other who has health insurance, most of the health insurance is Jamkesmas and Jamkesda. Government health financing in APBN is increase every year but still not convenient with the constitution. This low budget of Government health financing can obstruct achieving targets of MDGs 2015
Health Impact Of Occupational Risk In Palm Sugar Farmer And Their Care Seeking Behaviour Pattern In Banyumas District Indonesia

Siti Masfiah  
Siti Masfiah; Budi Aji; Siti Harwanti; Nur Ulfah; Hoang Van Minh  
Jenderal Soedirman University, Hanoi medical university  
Indonesia  
m_vieo@yahoo.com

Palm sugar farmer is one of the largest informal group in Banyumas district, Indonesia. This group contributed most workers in informal sector which is about 25.9% or 27,112 palm sugar farmer has been recorded in 2014. Palm sugar farmers do not have fix monthly salary, and they are exposed to occupational risk everyday. It was reported high number of work related accident among palm sugar farmer in banyumas district in 2010 until 2011. Health care as one of factor related to health outcomes was found difficult to access. There is no research related to health impact of occupational risk in palm sugar farmer and their care seeking behaviour pattern in Banyumas district.

This study aimed to identify health impact of occupational risk in palm sugar farmer and their care seeking behaviour pattern in Banyumas district in 2015.

This was cross-sectional study, conducted in 2015 in Banyumas district particularly in two sub-districts of Cilongok and Somagede. Both sub-districts were selected as area of study because most of palm sugar farmers located in these area. Cluster random sampling applied in this study, 207 palm sugar farmers were involved. Data was analyzed by logistic regression.

Study found that almost fourth of palm sugar farmers (23.7%) have experienced severe work related accident, such as falling from tree, fracture, and 82.1% of palm sugar farmers have experienced minor work related accident. About third of palm sugar farmers self-reported have chronic disease during last 12 months prior to research conducted. Health care were not utilized optimally, about fourth of palm sugar farmers (26.6%) seek the health services when they got health problem whereas the rest of them did not, but went to drug store/pharmacies (54.6%), did self-medication (10.6%), used traditional herb (3.9%). More that half of them (67.1%) have occupational related insurance, but did not have health insurance. Insurance ownership and education level revealed as significant factors influence to health outcome of palm sugar farmers.
Health Risk Assessment And Management Among Populations At Risk From NO2, SO2, TSP And Pb Exposure In The Office Region Kuningan Provinsi DKI Jakarta

Jenny Rotua Batubar
Jenny Rotua Batubara; Drs. Abdur Rahman, MEnv
Universitas Indonesia
Indonesia
jennybatubara89@gmail.com

Current polluted air has impacted to an increased levels of exposure disease incident in urban areas. Concentrations of SO2, NO2, TSP and Pb increased steadily from 2009 to 2013 in Kuningan, South Jakarta, Indonesia. This results based on ambient air monitoring by Badan Pengelola Lingkungan Hidup DKI Jakarta. Although the concentrations was below the national quality standards but some found that TSP was exceeded above 230 g/m3.

To estimate the risk quotient of SO2, NO2, TSP and Pb using Health Risk Assessment study

Observational analytical study with health risk assessment used to estimate a health risk in the population. Population at risk referred to one year minimum of inhaled exposure by agents (SO2, NO2, TSP and Pb) with 500 meters range from Air Quality Monitoring Station and found by total 49 people.

Result showed that office securites are at risk for noncancer effects of health with Risk Quotient (RQ) >1 for lifetime exposure. Other found that SO2 known at risk with RQ>1 to all of the population and only relevant during 14 years of exposure while the concentration of TSP and Pb showed there are no risk of health effects over the next 30 years. To manage health risk of RQ>1 the securities are should reducing time of exposure from 18 hours/day to 14 hours/day while motorcycle taxi and hawker should calculated 15 hours/day of time with total frequency 299 days/year. This study estimated the concentration of SO2 with 106 g/m3 and NO2 with 430 g/m3 should increasing an adversely noncarcinogenic of human health effect such as respiratory system disorders towards security, motorcycle taxi and hawker in Kuningan.
Health Risk Assessment From Exposure To Volatile Organic Compounds (Vocs) Among Street Vendors

Noppanun Nankongnab
Noppanun Nankongnab; Pornpimol Kongtip; Damrongrit Kaewkuea; Sukhontha Siri
Faculty of Public Health, Mahidol University
Thailand
noppanun.nan@mahidol.ac.th

Volatile organic compounds were produced from the burning of fuel oil of vehicles. People exposed to VOCs can affect to health such as irritation of the eyes, skin and respiratory system, nervous system damage, toxic liver and kidneys that can cause cancer.
The objective is to assess the health risk of volatile organic compounds exposure among street vendors

The air samples were collected by personal sampling with 55 volunteers at full time job, which were set up in the breathing zone of street vendors according to the NIOSH Manual of Analytical Method number 1501. The general characteristics and environmental information were collected by questionnaires. VOCs concentrations were analyzed by gas chromatography-mass spectrometry (GC-MS). After that, health risk assessment were according to USEPA.

The results found that the average of toluene, tetrachloroethene, chlorobenzene, ethylbenzene, o,m,p-xylene, styrene and 1,2-dichlorobenzene exposure among street vendors were 136.95±138.88, 5.29±1.84, 3.39±1.70, 13.97±3.98, 15.96±6.39, 5.70±1.09 and 6.03±1.74 µg/m3, respectively. The estimation of health risk assessment (non-cancer) including toluene, tetrachloroethene, chlorobenzene, ethylbenzene, o,m,p-xylene, and styrene indicated that the average of hazard quotients (HQ) were 7.57—10-3, 3.64—10-2, 9.28—10-4, 3.89—10-3, 4.46—10-2 and 1.57—10-3, respectively and the hazard index (HI) was 9.49—10-2. HQ and HI were less than one (no appreciable risk). The estimation of lifetime cancer risk of tetrachloroethene and ethylbenzene were 9.21—10-8 and 2.33—10-6 that were acceptable risk.

The health risk assessment from carcinogen, non-carcinogen and lifetime cancer risk among street vendors indicated that were acceptable risk according to USEPA recommendation.
Hospital Efficiency And Data Envelopment Analysis (DEA): An Empirical Analysis Of Kemang Medical Care (KMC)

A Heri Iswanto  
A Heri Iswanto  
Kemang Medical Care  
Indonesia  
hri.isw@gmail.com

The current health-financing situation in Indonesia has become imperative for health facilities in Indonesia to ensure more efficient means of providing services. In the current scenario, there is very little price competition and little incentive to contain costs and ensure efficiency. This study focuses on analyzing the hospital efficiency of KMC. The study makes an attempt to provide an overview of the health services provided by hospitals in KMC in terms of their technical and allocative efficiency.

The purpose of the study addressing the efficiency issue is to provide empirical analysis of hospital in Indonesia.

This cross-sectional descriptive study involved all the three years financial performance of KMC Hospital. Data collected from 2011 - 2013 based on financial report (audited). The production model for hospital sectors requires the treatment of multiple inputs and multiple outputs. In this study for variable inputs: cost of goods sold (COGS), operational cost (OC), general cost (GC), patient cost (PC) and doctor's fee (DF). For output variable: revenue (RV), gross margin (GM) and net margin (NM). Efficiency scores were computed using Data Envelopment Analysis (DEA).

The absolute efficiency of KMC as a whole was found to have improved after implemented lean. Two years before implemented lean represents not satisfactory level of efficiency. In 2011, efficiency level of input variable COGS: 91.1%, OC: 67.5%, GC: 77.9%, PC: 86.4% and DF: 86.4%. In 2012, COGS: 94.3%, OC: 89.7%, GC: 92.0%, PC: 86.7% and DF: 95.2%. In 2013, overall variable 100%. In 2011, efficiency level of output variable RV: 100.0%, GM: 85.3% and NM: -1,131.3%, in 2012, RV: 100.0%, GM: 90.9% and NM: 432.8%, in 2013, overall variable 100%.

In this study DEA has proven to be a useful methodology for measuring efficiency a sectorial analysis of hospital within a national setting. Furthermore, DEA allowed to analyze the inefficiencies of the hospital sectors in detail and helped to identify possible improvements and quantify the amount of money that could theoretically be saved, address of inefficiencies were eliminated.
House Condition, Clean And Healthy Behavior, And Scabies Diseases On Scavengers In Alak Landfill Kupang City, NTT Province

Wanti
Oktovianus Sila; Irfan; Wanti
Health Polytechnic, MoH Kupang
Indonesia
trivena78@yahoo.com

Scabies is a skin disease caused by mite (Sarcoptes scabei). Scabies is spread either directly through direct contact with the patient or indirectly through clothes, bed linens, towels, pillows, or water that contaminated with Sarcoptes mite. Factors that contribute to disease transmission of scabies is the physical condition of the home and behavior. Scavenger is a risk group for transmitting scabies due to frequent contact with the waste that often contain germs.

This study aims to determine the house sanitation, clean and healthy behavior, and detection of disease incidence of scabies on a family scavenger in Kupang.

This study is a descriptive observational study. Samples are 50 scavengers in the landfill Alak. Collecting data using interview, observation and direct examination of scabies disease on scavengers by paramedics.

The results showed that 80% of house do not have qualify sanitation and just 20% of house have qualify sanitation. While clean and healthy behavior of scavengers with a percentage of 50% are good, 46% are sufficient and 4% are less. The results of medical examinations scavengers found 12% suffered from scabies on the hands and feet, while 88% do not suffer from scabies. It is estimated that the presence of scabies on scavenger related with their house sanitation and clean and healthy behavior.

The conclusions are house sanitation of scavengers only 20% were eligible, only 50% of scavengers who live clean and healthy behavior well, and found 12% of scavengers had scabies. Suggested need counseling from health office involves the sanitary office for scabies prevention through increased sanitation home and clean and healthy behavior and also need a thorough treatment of patients with scabies to prevent transmittion to their family members.
Hypertension On High School Teachers In Tangerang City

Trini Sudiarti
Eka Restiana Adiningsih; Trini Sudiarti
Faculty of Public Health Universitas Indonesia
Indonesia
trini@ui.ac.id

The prevalence of hypertension in Indonesia amounted to 25.8% (Riskesdas, 2013). Uncontrolled hypertension can increase the risk of cardiovascular diseases such as stroke, heart attack, kidney disorders and even sudden death.

The focus of this study is to discuss about hypertension and its risk factors on high school teachers in Tangerang City.

This is quantitative study with cross sectional design and 119 sample. Data collection was done in four weeks in March-April 2012 in Tangerang. This study used univariate and bivariate analysis. Bivariate analysis using Chi Square and t test independent.

The result shows that the prevalence of hypertension is 29.4%. In this research, hypertension is correlated with BMI, sodium consumption, and stress. Advice given is to provide education about hypertension and its prevention by implementing a healthy lifestyle such as controlling weight and food intake, exercising regularly, and reduce stress.
Identification Of Patient Safety Culture In Independent Practice Of Midwife

Nina Herlina
Nina Herlina
Andalas University
Indonesia
herlina.winaldi@gmail.com

Although patient safety culture is an important factor in preventing undesirable incident and an indicator of health service quality. But, patient safety culture has not been implemented yet in independent practice of midwife. Hospital is the only one which has been implementing the patient safety culture.

Aim of this study is to identify of patient safety culture in independent practice of midwife.

The research is a qualitative study. The design used survey exploration of 10 th midwives on May 2015 in Jakarta. Collecting data was conducted with deep interview used questioner about patient safety culture in independent practice of the midwives to exploring target, dimension, and steps of patient safety culture in independent practice midwives in accordance with hospital guidance.

From six dimensions of patient safety, the midwives had been implementing three of them, they are: identifying every patient correctly, relieve infection risk of health worker, relieve risk of worse mistakes which can happened to patient. Culture of reporting undesirable incident has not been implemented yet in independent practice of the midwives.
Identification Of Risk Factors Of HIV Infected Patients At VCT Clinic In Medan City

Rahayu Lubis
Rahayu Lubis; R. Kintoko Rochadi; Surya Utama
Faculty of Public Health university of Sumatera Utara
Indonesia
rahayu_lubis@yahoo.com

HIV infected patients is still a public health problem in Indonesia. Based on the Indonesian health ministry's annual report shows the number HIV infected patients continues to increase and is generally in the productive age.

The aim of this study was to identify the risk factors of HIV infected patients at Voluntary Counseling and Testing (VCT) Clinic in Medan city

It was a cross-sectional study among 100 adult HIV infected patients receiving treatment in VCT clinic in 2014. Data were collected by interviewers using questionnaires. The Chi-square analysis was performed to calculate relationship of those independent factors socio-demographic (aged, gender, education, occupation, marital status), mode of transmission (sexual, non sexual), clinical condition (opportunistic infection (OI), type of OI, baseline CD4, ARV drug) with HIV infected patients.

The study found that majority patients in aged 20-39 years, male gender, have education more than 9 years, worked, married, mode of transmission by sexual relationship, with OI, CD4 baseline 200 cell/µl and received antiretroviral. There was significantly relationship between gender and occupation (p = 0.008), gender and marital status (p=0.007), type of OI Tuberculosis and baseline CD4 (p=0.032). Meanwhile, other factors have no significantly association with risk factors of HIV infected patients.
Implementation Science As Strategies Of Implementation In Health Education In Pregnant Women Class For Improved Access Prevention Of Hiv Transmission From Mother To Child

Dewi Purnamawati
Dewi Purnamawati; Ratna Djuwita; Kemal Siregar; Sudijato Kamso; Budi Utomo; Hadi Pratomo; Toha Muhaimin
STIKes Kharisma Karawang
Indonesia
dpw_80@yahoo.co.id

Feminization of the epidemic put women, especially housewives as a group at risk of contracting HIV. Increasing the number of women affected by HIV will have an impact on HIV transmission from mother to baby, therefore prevention of HIV transmission from mother to child is very important. However, PMTCT program has not been implemented properly, it is seen from the small proportion of HIV testing of pregnant women reached 2.5%. Lack of competence, facilities, infrastructure and knowledge of pregnant women, seems to have an impact on the low access of PMTCT. Therefore we need a strategy that can improve the implementation of the government's support, improve the provider competence and empower pregnant women as known as implementation science. Implementation science is proven to provide the tools that are used not only improve the effectiveness of the program but also explain how, why and in what circumstances (Pandian et al, 2011)

This study aimed to get a model of effective implementation strategies and able in developing health education on pregnant women class as improving access to prevention of HIV transmission from mother to child. Moreover this study specifically wanted to develop models and evaluate the success of the implementation and effectiveness of the model in increasing access PPIA

This research is operational research using quantitative and qualitative approaches. Mixed methodology will be performed in parallel. Quantitative approach was done with quasi experimental design with post-test only control group design. This research was done for nine months to 770 pregnant women, which is divided into 385 intervention group in Karawang and 385 control group in Bekasi. The intervention is done by applying the four stages of implementation science (exploration, installation, implementation and sustainability) in the form of leadership and organizational support, increasing competence of facilitator’s pregnant women class through training, health education of HIV in pregnant women class and implementation of HIV testing in pregnant women class. Population in the area of intervention is 1) Regional Leader 2) Head of the Health Department; 3) Midwives (drivers); 4) Pregnant women. Population in the control area is pregnant women. Qualitative approach used to look deeply how PPIA are implemented

Data were analyzed according to the research purposes. The successful implementation of the strategy implementation seen from the support organization in the implementation phase, an increase in the ability of health providers, the implementation of health education in the pregnant women class as well as the implementation of HIV testing for pregnant women in the pregnant
women class. The effectiveness of the implementation of the strategy implementation assessed using bivariate analysis and multivariate analysis with multiple logistic regression.

The results showed that the model with the stages of implementation strategies successfully implemented according to the stages of implementation and effective to improve access PPIA. The success of the exploration stage seen from the support of the Department of Health in each phase of activity. The shape of the support of the Department of Health is to facilitate training of HIV, administratively facilitate the procurement sources, facilitate the provision of rapid test specifically for health centers that participate in the training as much as 100 rapid test at the start of activities and facilitate the transfer of duties of midwives in conducting HIV testing of pregnant women in the pregnant women class.

At instalasi stage, success looks of 1) Establishment of guidelines for intervention, in the form of modules health education of HIV for midwives and health education media in the form of booklets and a flip chart; 2) Implementation of the training of midwives in order to increase the competence of health providers. The success in the implementation phase, seen from the increase in access PPIA in Karawang, measured from the increase in the number of health centers that can provide services PPIA, an increasing number of pregnant women are offered HIV testing and increase in the number of pregnant women who want to be tested for HIV. Sustainability of this program depend on support of the Department of Health.

This study also shows that the implementation model is effective to improve access PPIA. At least 85.5% of pregnant women in Karawang has done testing for HIV. Model final on individual variables showed that pregnant women who live in Karawang is more likely to access the PPIA by 64 times compared to the control after the control by the role of mother, husbands education, husband’s knowledge and education of pregnant women as confounding. Model PHC end variable also showed that pregnant women living in Karawang are more likely to access the PPIA by 72 times after being controlled by HIV training facilitator. This study shows that with implementation strategy, the central government policy can be implemented well at the local government level. Implementation science is a new solution that can bridge the gap between policies with effective interventions. Implementation science proved to be a valuable tool that is used not only to improve the effectiveness of the program, but also to explain what the program is successful, why, and under what circumstances (Pandian et al 2011).

Active implementation means using strategies to support and adopt a new program that will be implemented (Schroeder, 2011). Schackman (2010) stated that in order to become established in the research field of HIV and AIDS, there should be better coordination between the funders of research with funding from the program and make decisions together based approaches and scientific evidence. Youngeleson, et al, 2010 showed that the method of system improvements, changes and additions to the protocol/reallocation of resources contributed to the increase in PMTCT.
Improvement The Role Of Public Health As The Gate Keeper Control Or Use The Insured National City Bengkulu

Betri Anita
BETRI ANITA, HENNI FEBRIAWATI, YANDRIZAL
Faculty of Health Sciences, University of Muhammadiyah Bengkulu
Faculty of Health Sciences, University of Muhammadiyah Bengkulu
Indonesia
henni_febriawati@yahoo.com

The National Health Insurance began in 2014 gradually toward Universal Health Coverage. The National Health Insurance goal to facilitate public access to quality health services. National Social Security System aims to provide basic needs are met guarantees a decent life for each participant and/or family members. BPJS organizing principle is: cooperativeness, participation is mandatory, fee based on a percentage of wages/earnings, and nonprofit management and mandate.

Catastrophic expenses, among others, for the treatment of non-communicable diseases is long and expensive. Strategies to prevent or reduce the incidence of pain intensity remains low through the deployment area of information and tools to help individuals understand the health conditions, risks, treatment options with available resources.

Prevention is a key element of a comprehensive health reform strategy aimed at improving the health of Americans, reduce the social and financial burden imposed by the disease can be prevented. Based on the evidence package of prevention services on a balanced basis is the cost, while providing great health benefits. Payers and policy makers should support the increased use of evidence-based prevention services for the right reasons and with the expectations of their impact on health expenditure.

The Government is committed to universal health coverage coverange is a great resource mobilization for health insurance, and would have raised the issues of the quality of public health services. Changes in the orientation of investment perspectives in health personnel skills base to meet the challenges faced, access to basic health care a necessity. Active standby village now offers the potential to make IHC to focus ranging from mothers safe to disaster preparedness disease surveillance with empowerment. Rebuilding the village's role as a center of activity-based alert the wider community, now need to be built to meet the challenges facing the development and implementation of policy in Indonesia.

Problem Formulation Research: Based on the description of the background, the problem can be formulated how effort and referral service efficiency by reducing the number of visits and referrals by health centers. General Purpose assess the efficiency of health care by reducing the number of hospital visits and referrals at the health center.

This study uses a qualitative method approach with exploratory design. a case study approach (case study) using qualitative methods for observation, obaservasi documents, in-depth interviews. The findings of qualitative methods in the form of support, obstacles, challenges.
Analysis Unit: PHC as a health care facility that organizes public health efforts and the efforts of individual health first level, with more emphasis promotive and preventive efforts, to achieve the degree of public health as high. PHC has the task of implementing health policies to achieve the goal of health development in his region in order to support the establishment of a healthy districts.

Evaluate to research by using qualitative method approach to assessing the implementation of Posbindu PTM, implementation of IHC, menerapan manajemen Pusmesnas, public perception of the services at the health center of the 4 (four) health center in the city of Bengkulu.

This study design is a design study exploratory evaluation, program evaluation menggunakan case studies. Qualitative method approach where investigators exploring constrained systems (case) or some constrained systems (cases) from time to time, through detailed data collection of deep, involving a variety of sources of information by means of observation, interviews, documents or reports, reports a description of the case and themes based case.

PHC as the first level of health care providers (FKTP), has the function of improving public health through promotive and preventive services. PHC management model development and community empowerment in an effort to improve the health, decrease the number of hospital visits and referrals to hospitals, based on analysis of interviews with managers of health centers, Posyandu and Posbindu arranged alternative development models.

Description of the activities carried out each element as follows: build health centers and integrated health Posbindu, helping the activities that must be carried out by health professionals such as: antenatal care at the time of IHC, memeriksaan blood sugar, uric acid, cholesterol when Posbindu and treatment to follow up the results of the examination is not treatment general.

PHC to evaluate the monitoring results implementation Posbindu PTM and Posyandu.

a. PHC gives a report to the City Health Office to pelaksaaann IHC, Posbindu and asked for support to advocate to the Mayor and other agencies that can mengerakan subdistrict and village chief; b. PHC provide input and advocacy to the sub-district and urban village head based on the results of the implementation of the IHC and Posbindu, in order to mobilize the public to come to carry out checks in an effort to detect early, to prevent non-communicable diseases in Posbindu, and prenatal care and early childhood development in integrated health monitoring; c. Minilokakarya conducted every month membahan PHC program achievement, causes and prevention solutions that the number of visits height and work on improving the quality of service, so that people do not ask for less disease referred to services; d. Implementation Minilokakarya identify the most disease and sought the causes and prevention efforts during minilokakarya each month; e.Identifying the cause berpersepsi community health center quality of service remains low, to be discussed at minilokakarya to look for the cause and efforts to improve quality; f.Mayor advocate in order to instructions /circulars to mobilize the community; Follow up and menadvokasi policy to work the Mayor of the community; g.Monitor the activities of sub-district and village heads in an effort to mobilize the community; h.Monitor and assist Kader make efforts so that the PKK and RT can help mobilize the community; i.Puskesmas do counseling and efforts to prevent disease high in the last month to be decreased in the current month;
As health professionals, nurses have a duty in nursing care. Some of the activities of public health care among others are finding suspects or case. In 2013, PHN has found 408 TB suspects.

The purpose of this study is to measure the increasing of nurses role in finding TB suspects in Palu. This study used a quasi-experimental method with total population sampling. 149 nurses were divided into intervention group of 70 nurses and 79 nurse's control. Regression analyses was used to analysed the study.

This study showed a difference between the detection rate of suspected intervention group and the control group by 4.1. There is an increasing trend of the discovery of TB suspects in the intervention group in comparing with the control group. An effort to maximize the role of nurses in making policy and also funding to increase the motivation of nurses are needed.
Independent Family Planning On Reproductive Age Couple In Gresik District

Yuly Sulistyorini

Yuly Sulistyorini; Nunik Puspitasari; Diah Indriani; Rachmah Indawati

Universitas Airlangga
Indonesia
yuly.sulistyorini@gmail.com

Based on the results IDHS 2012 showed a trend that TFR was stagnant in 2.6 per woman until 2012 (BKKBN, 2012). It potentially will lead to increase in the number of births. After the economic crisis, people have difficulty meet basic needs. There were two possibilities that will be done by the people that do drop out the use of contraceptives and replace the use of effective contraception to less effective. FP (Family Planning) acceptors must pay from their own money to get contraception.

The purpose of this study was to analyze couples of reproductive age in FP independently. The high number of independent FP indicate an awareness to birth control.

This study was observational study with cross sectional design. The population was couples of reproductive age in Gresik district. The sample was reproductive age couples whose wives ages 15-49 years old in 2014. Multi Stage Random Sampling with RT as a cluster used for sampling. There were 90 respondents (45 husbands and 45 wives) and interviewed using a questionnaire. The research variables were demography characteristics, desired number of children, number of children was borned, the cost of birth control and independent FP acceptors.

The results showed that majority of couples want two children and the wife use injection (56.7%). The majority of the reasons for choosing the injection because of compatibility. FP services obtained free of charge of 83.3%, whereas making the payment alone amounted to 5.6%. FP services are obtained not by spending of their own money because of facilities of their workplace. This conditions could have an impact on their drop out as acceptors or switching of an effective birth control to be ineffective. The more efforts should be made to increase public awareness and easiness to obtain FP services (nearby, cheap and affordable).
The percentage of poor people in East Java decreased from 2012 (13.08%) to 12.73% in 2013, as well as the percentage of poor people in Surabaya from 2012 (6.23%) fell to 5.97% in 2013. The decrease in the percentage of poverty was because of the role of some determinant indicators that influenced the determination of the poor families criteria.

The Government had many programs to improve the welfare of the community. Government programs include: Education, Health, Economic, social, demographic and infrastructure. Health program of the government was expected to target the poor families, thus, the determination of indicators of poor families was required.

According Soenarnatalina (2008) there were five important composite indicator for determining indicators of poor families, those were health indicators, education indicators, housing and environmental indicators, social and cultural indicators, economic indicators.

Analyzing the difference tendency in indicator of poor families in urban and sub-urban area

Survey research of poor families in Surabaya done using cross sectional design by doing interviews and observations from the chosen respondents (family) in the city of Surabaya.

Sampling was done by multistage random sampling in three stages (stage). The first stage was the distribution of Surabaya cluster area, which was divided into urban and sub-urban districts, randomly chosen of sub-district, which was one urban districts and one suburb area. The second stage in districts cluster with random sampling of one sub urban village and one urban village. The third stage in villages cluster with random sampling of 7 household in each village and each household would be taken 20 family, that the sample size was 280 family.

Results of multivariate analysis on indicators of health, education, housing and home environment, socio-cultural and economic indicators there was no difference between urban and sub-urban area (p = 0.001), proved that determinant indicator was very important in determining the status of poor families both in the region urban and sub-urban area.

Univariate analysis results show that health indicators differ between urban and sub-urban region with p = 0.001, indicators of education between urban and sub-urban region with p = 0.001, indicators of housing and home environments differ between urban and sub-urban region with p = 0.024, social and cultural indicators differ between urban and sub-urban area with p = 0.001, while the same economic indicators between urban and sub-urban region with p = 0.245, the same economic indicators between urban and sub-urban regions due to the economic needs of the family in suburban will be fulfilled quickly that within a relatively affordable to the urban area.
Results of the analysis of five indicators which were composite indicators of poor families showed that there were differences between urban and sub-urban area with $p = 0.001$. The conclusion from this study was that there was a difference significant indicator of poor families in urban and sub-urban area.
Nutrition has major impact for the growth and development of the body in adolescence (Latham, 1997). Nevertheless, many of the adolescents in developing and developed countries in the Southeast Asia region do not meet their national recommended dietary intake (Peltzer & Pengpid, 2012). Since no study has been conducted to explore the dietary pattern of adolescents in West Nusa Tenggara, this study aimed to explore this among the high school students in West Nusa Tenggara, Indonesia.

To explore the dietary pattern of adolescents among the high school students in West Nusa Tenggara, Indonesia.

A cross-sectional study was conducted on students randomly recruited from public senior high schools in Mataram, West Nusa Tenggara, Indonesia. The questionnaire included variables on their demographics, dietary pattern of the main food groups and their frequency.

A total of 315 adolescents were recruited with about 60% of them being female. Among these high school students, 52.05%, 51.43%, 90.48% and 92.70% of them met the recommended daily vegetable, fruit, carbohydrate and protein consumption, respectively according to the Indonesian "Pedoman Gizi Seimbang". Despite the availability of native vegetables and tropical fruits, less than 8% of the adolescents consumed at least two serves of vegetable and less than 10% consumed at least one serve of fruit every day. In addition, only about 20% of them had their breakfast in the morning while majority of them (56%) had their breakfast late at between 12 and 3pm. Majority of them (56%) had lunch between 12 and 3pm while dinner was usually consumed between 6 and 9pm (61%). While about 5% missed breakfast and lunch, 15% missed their dinner. The vegetable and fruit intake among the adolescents needs to be further increased. The adolescents need to be encouraged to eat a balanced diet and to not skip meals. Public health practitioners need to work in collaboration to increase the fruit and vegetable intake among adolescents and lower the rates of meal skipping.
Internal And External Factors On The Village Midwife's Role In Efforts To Reduce Maternal Mortality Rate (Mmr) In Four Health Centers District Jeneponto

Yusriani
Yusriani ; Ikha Purnamasari
Indonesian Moslem University (UMI)
Indonesia
yusriani83@rocketmail.com

Maternal Mortality Rate in Indonesia skyrocketed from 228 in 2007 to 359 per 100,000 live births in 2012, it is necessary to get attention through the Maternal and Child Health. The village midwife in society is a condition to determine the success of health services in rural areas. Lower village midwife's role in efforts to reduce maternal mortality is assumed related to internal factors within midwife itself is age, education level, years of service and the origin as well as external factors, namely shelter and security environment. Based on data from the Department of Health Jeneponto MMR in 2014 as many as 14 people increased from 5 people in 2013.

This study aims to determine the internal and external factors related to the role of the midwife in the village in decreasing MMR in the four health centers Jeneponto Year 2015.

This research uses a cross-sectional study. The population in this study were all midwives on duty at four health centers Jeneponto. Sampling technique is total sampling. Data were analyzed using univariate and bivariate with chi-square test.

The result showed that internal factors such as age midwife can not be statistically tested, because 100% aged midwife including the productive age group, educational level (p = 0.188) and tenure (p = 0.245) no significant relationship with the role of midwives in the Reduce Maternal MMR. While external factors have a significant relationship with the midwife's role in reducing MMR in four health centers Jeneponto consist of residence midwives (p = 0.002), environmental security (p = 0.024), and a local origin (p = 0.023).

Expected to Head of Health Department in order to stay in the village midwife (sub), need more intensive supervision and evaluation of the midwife, training and relocation polindes in a secure environment, need to be made policy with collaboration between the health center and the village government in the provision of equipment and facilities to shelter midwives (sub) viable so that midwives in villages can work well.
Food is known as the spread of pathogens and toxins produced by pathogenic microbes. Improper food management or food contaminated by bacteria can cause food poisoning and often cause outbreaks. Event food poisoning often occurs when food is cooked on a large scale. On April 27, 2015, Tempurasi health center in Lumajang District reported that there are some patients with similar symptoms such as dizziness, nausea, vomiting, diarrhea at the same time. After investigation, we know the incident occurred after consuming food that comes from an event 40 days the baby is born in Tegalrejo Village Lumajang District.

Aim of this study is to know the outbreak status determination, overview of epidemiology, etiology and source of poisoning. This investigation is a case-control study. The population in this study are all members of the family are included in the list of families who invited the 40-day event newborns and get food from the event. Sample cases serve as the object of inquiry is all the people who eat the food of the event 40 days newborns either with symptoms of nausea, dizziness, diarrhea, heartburn, heat, or vomiting after consuming food from the event it. Collection data instruments use Guidelines Research and prevention outbreak Infectious Diseases and food Poisoning Dirjen P2MPL health department Republik Indonesia in 2011 and guideline of structured interview. The data used primary and secondary data. Primary data taken through observation in food processing location and tracking cases. Secondary data, taken from the report Tempurasi health center and health office of Lumajang District related with the number of people, addresses, symptoms and foods eaten. The data were analyzed descriptively.

Outbreak of food poisoning is an event where there are two or more people were sick with symptoms of the same or almost the same after consuming food and based on epidemiological analysis, the food proved to be a source of infection. Based on report from health center, case in the village of Tempurasi is outbreak could be due based on reports from the local health center has been a drastic increase in the number of patients over a period of almost simultaneously with the same symptoms. The occurrence of food poisoning occur after the celebration began 40 days newborns conducted by one of the residents of the District Tegalrejo Tempurasi. Celebration event took place on 25 April 2015. The number of invitations is 28 households. The food served is sweet tea while take-away food is rice, chicken, noodles, fried sauce, lodeh, anointing, egg, botokan and iwel-iwel. Around begin at 17:30 on the same day, some residents began mendatangan nearest health facility with symptoms of nausea, vomiting, diarrhea, headache and heartburn. Based on the results of a report from the Department of Health Lumajang and results tracking cases until 26 April 2014 total cases recorded is 64 people, mostly experienced by women (AR = 70.21%) and most common in school-age children are 6-11 years (AR = 100%). Based on the results of laboratory tests are a source of food poisoning is a vegetable (soybean and peanut) with a value of AR = 9.05. The cause of outbreaks of food poisoning is the presence of E. coli.
Acanthamoeba spp. is an opportunistic pathogen that can be isolated either from engineered environment or patients samples. It can be divided into 20 genotypes that can be associated with their respective infection. The most prevalence infection associated with this amoeba is Acanthamoeba keratitis (AK) and Granulomatous Amoebic encephalitis (GAE). Acanthamoeba can survive harsh environmental conditions due to the ability to switch from motile trophozoites to immobile cysts during starvation, desiccation, hypoxic conditions and extreme temperature changes. Research has indicated the resistance of their cysts to commonly used disinfectants in a hospital setting, thus making it more difficult to control in a healthcare setting. This study was carried out to study the risk of exposure to these amoebae in a hospital setting by isolating Acanthamoeba spp. from air-conditioning system in both wards and operating theatres, provided that all medical devices and surgical items used in procedures are sterile and safe. Comparison of the rate of isolation of Acanthamoeba spp. between the two settings in UKMMC as mentioned above will be conducted to identify the more prone infection settings in hospital.

Dust samples were collected from air conditioning vents from selected wards and operating theatres in UKMMC. Five operation theaters (OT2, OT3, OT7, OT10, OT13) and five wards (M1, M6, OF, OS, S5) were selected as study sites. All procedures in collecting and processing the samples were done aseptically and according to the standard procedure as practiced in Culture Laboratory, Department of Parasitology & Medical Entomology, Faculty of Medicine, Universiti Kebangsaan Malaysia. Dusts from air conditioning outlets were swabbed using sterile cotton swabs that were moistened with Page Amoebic Saline and immediately inoculated onto non-nutrient agar. The tip of the cotton swab were cut and left inside the plates. Plates were then sealed with parafilm and transported to the laboratory. Few drops of heat killed E. coli were added to the plates as food source and sealed with parafilm. Plates were incubated at 30°C and observed daily using inverted microscope for 14 days for presence of cysts and trophozoites. Cyst were observed by staining it with 0.01% methylene blue solution and observed using a compound microscope with 1000X magnification. Trophozoites were observed under phase contrast. All positive strains are classed into three groups based on the morphology. Findings were presented in the form of percentage and analysed using chi-square statistical analysis.

A total of 92 samples were collected; forty from air conditioning outlets in wards and 54 from operation theatres. Eighteen (45.0%) out of 40 samples from wards were positive while 19 (36.5%) samples were positive for operation theatre. Statistical analysis showed no significant different in the isolation rate of Acanthamoeba spp. from wards and operation theatres ($\chi^2 = 0.673; p=0.412$). This study showed that high isolation rate of Acanthamoeba spp. from air conditioning outlets in
UKMMC. As this organism is known to be able to cause infection and at the same time plays a role as hosts to other pathogenic microorganisms, subsequent identification of their bacterial endosymbionts from isolated strains was recommended for better management plan on the related infections.
Kadisu Program As An Alternative Effort Of Enhancement  The Motivation And College Student Learning Achievement

Fauzie Rahman
Fauzie Rahman; Vina Yulia Anhar; Maman Saputra; Deny Frayoga; Fahrini Yulidasari; Atikah Rahayu; Lenie Marlinae
Public Health Study Program, Medical Faculty, Lambung Mangkurat University, Banjarbaru, Indonesia

Students at the primary level will be faced with several problems in learning due to changes in the pattern of the student as a college student. This resulted in a decrease in motivation and learning achievement. One alternative is to do with the implementation of the foster brothers program or kakak adik asuh (Kadisu) program.

The aim of this study is to describe the motivation of college student at primary level and college student achievement differences before and after joining Kadisu program.

This study used an experimental method to test the GPA before and after the implementation of the Kadisu program. Kadisu program is a mentoring and coaching program from the top level college student (mentor) with a selection process based on academic ability and willingness to establish college students at primary level (foster brother). The respondents were the college students (on primary level) at Public Health Study Program of Medical Faculty, Lambung Mangkurat University which is the total of respondents were 82 people, with 12 people selected mentors and use guidelines for the implementation of activities in the form of Guideline Book for Implementation of which serves as a guide that is used for program activities. The data obtained by statistical test using paired sample t test.

The motivation of college student at primary level is quite good at learning by 43.9% and classified as good by 56.1%. Average of GPA of students prior to the implementation of the program is 2.82, and after the end of the program is 3.09. Based on statistical test results showed that there is differences in average of GPA before and after implemented Kadisu program (p-value 0.00). These results indicate there is a significant correlation between the implementation of the Kadisu program to the improvement of GPA of college student at primary level. So, Kadisu program can increase the motivation of college student at primary level to learn, so it needs to be developed and used as an alternative teaching methods to enhance the achievement of college student.
Knowledge Of The Health Consequences Of Tobacco Smoking And Smokers' Intention To Quit Smoking Among Malaysian Adults

Tee Guat Hiong
Tee Guat Hiong; Muhammad Fadhli Mohd Yusoff; Azahadi Omar; Tahir Aris; Chan Ying Ying; Hasimah Ismail
Institute for Public Health
Malaysia
ghiong88@yahoo.com

The Malaysian Global Adult Tobacco Survey (GATS), 2011 showed that 23.1% of adults smoked tobacco. Despite various initiatives in tobacco control carried out by the Ministry of Health to combat smoking habits in Malaysia, the overall prevalence of smoking has been hovering around 25% over the last quarter century. To encourage smokers to quit smoking, they need to be equipped with knowledge on the detrimental effect of tobacco smoking. Knowledge of the health consequences of tobacco smoking is important in predicting smoking-related behaviour and plays an integral part of tobacco cessation efforts.

The objectives of this study were: 1. to examine the level of knowledge of the health consequences of tobacco smoking among current smokers and non-smokers, 2. the relation between knowledge of the health consequences of tobacco smoking and intention to quit among current smokers.

Data were obtained from Global Adult Tobacco Survey, Malaysia conducted in 2011. GATS was a nationally representative cross sectional household survey using multi-stage cluster sampling design conducted on 4250 adults aged 15 years and older. Respondents were asked whether they believed smoking causes serious illness, stroke, heart attack, lung cancer, oral cancer, throat cancer, premature birth, miscarriage, gangrene, bladder cancer, stomach cancer and osteoporosis as well as breathing other people's smoke can cause serious illness to non-smokers. Current smokers were also asked on their intention to quit smoking. Descriptive statistics and chi-square test were used to analyse the proportion and association between knowledge of the health consequences of tobacco smoking and smokers intention to quit.

More than 90% of respondents (current smokers: 93.9%, non-smokers: 96.9%, p-value <0.001) believed that smoking can cause serious illness. Non-smokers were significantly more likely than smokers to believe that breathing other people's smoke can cause serious illness in non-smokers (current smokers: 90.7%, non-smokers: 93.5%, p-value = 0.005). Significantly more non-smokers have knowledge on health consequences of tobacco smoking on specific diseases (stroke, heart attack, lung cancer, oral cancer, premature birth, miscarriage, gangrene, bladder cancer, stomach cancer and osteoporosis) related to tobacco smoking. Current smokers who were more aware of the health consequences of smoking were more likely to intend to quit smoking. The odds of intention to quit smoking among current smokers who had the knowledge compared to those who did not have the knowledge ranged from 1.69 for throat cancer to 2.94 for lung cancer. Our findings highlight the need to increase awareness about the health consequences of smoking especially among current smokers in Malaysia. Educational efforts to disseminate the detrimental health effects from tobacco smoking are required to increase quit intentions and subsequent quitting among current smokers.
Vegetarian mothers are known to have lower pre-pregnancy nutritional status, thereby posing an increased risk to pregnancy outcomes, including lower maternal fat stores for lactation.

This study aimed at analyzing the association between predominant breastfeeding on the nutritional status of lactating vegetarian mothers and growth of their breastfed infant.

A longitudinal study was conducted on mothers-infants pairs who practiced breastfeeding in five cities in Indonesia who were selected purposively based on Indonesia Vegetarian Society database. A total of 42 pairs vegetarian and 43 pairs nonvegetarian were followed since delivery to 24 weeks infant age. Anthropometric measurements (weight of infant and mother, length of infant) were taken of each subject every 4 weeks. In the end, 15 pairs vegetarian and 18 pairs nonvegetarian who successfully implement 24 weeks of predominant breastfeeding were analyzed.

Socio-demographic characteristics did not differ between the two dietary groups except in maternal parity. Vegetarian mothers had lower pre-pregnancy BMI but higher pregnancy weight gain compared to nonvegetarian mothers. This study shows that predominant breastfeeding had no effect on infant weight and length but had significant effect on mothers BMI and weight loss.

Without adequate energy intake during lactation, the postpartum nutritional status of the vegetarian mothers declined over time. The nonvegetarian group in this study having a significantly greater energy intake compared with the vegetarians, this is the key factor for successful lactation performance that is 6 month duration of predominant breastfeeding, and good nutritional outcomes for both the mother and the infant.
Life Quality Improvement In Patients Of Methadone Maintenance Therapy Program

Isti’anah Surury
Isti’anah Surury, Sri Herwanti, Munaya Fauziah
University of Indonesia
Indonesia
istianahsurury@gmail.com

HIV/AIDS is an infectious disease that is a public health problem in the world. The number of cases of HIV/AIDS in the world in 2013 reached 35 million cases (WHO). While the number of HIV cases in Indonesia as many as 54,231 and 134,042 AIDS cases (DG & PL MoH RI, 2014). At this time the transmission through the use of non-sterile needles became the second largest order after heterosexual as well as being a major risk factor in the spread of HIV/AIDS in Indonesia.

The objective of this study was to describe the improvement of quality of life for injecting drug users (IDUs) as Methadone Maintenance Treatment Program (MMTP) patients in Public Health Center Ciputat, South Tangerang, Banten, Indonesia Year 2010-2013 under the Minister of Healths Regulation number 57 year 2013.

This study was conducted in June-September 2014 using cross sectional study design. The total sample was 32 respondents of MMTP patients.

The study found that there were 40.62% of HIV positive respondents and 15.63% of the respondents have not checked (do not know). There was an increase in the trend of patient endurance every year since 2010 up to 2013. There was an increased quality of life in patients and decrease patient involvement in risk behaviors related to drug use and unsafe sex and involvement in crime. The clinic and health authorities should carry out an evaluation of MMTP every year. Patients should keep themselves motivated to continue to follow MMTP to succeed regardless of risky behavior.
Local Traditional Belief Related To Disaster Vulnerability Among People Living In Surrounding Mount Kelud, East Java, Indonesia

Mondastri Korib Sudaryo
Mondastri Korib Sudaryo; Evi Martha
Universitas Indonesia
Indonesia
maqo19@gmail.com

On 16 October 2007, although the local authorities in Kediri and Blitar Districts, East Java, Indonesia had commenced the evacuation of 116,736 people, residing within the radius 10 km from the volcanos crater, due to the highest level of alert status of Mount Kelud, there were still about 25,000 people remained in the danger zone, ignoring evacuation order. The degree of disaster risk of which might be experienced by vulnerable population living in surrounding Mount Kelud is related not only to community and government capacity to manage potential impact but to also to social vulnerability, including local traditional belief.

This study was aimed to elaborate traditional belief of local people living in surrounding Mount Kelud as one of important social vulnerability determinants of the disaster risk due to Mount Kelud eruption

Qualitative design was used in this study and data was collected through in-depth interview of 7 key informants and focused group discussion in 6 different groups of people.

We found that the eruption of Kelud was believed not as independent nature phenomenon, but rather as an event having connection with other huge or massive people conflict or casualties. This view underlines the close relationship between human and nature behaviors, more in spiritual sense, as such that one may affect or indicate the occurrence of the others, as if both have link of consciousness. To maintain the companionship between human and nature, i.e. the Kelud, it is reported that periodically some local people conducted a traditional cultural ritual, called Larung Sesaji, to give offerings of precious stones (like diamond) to the mountain crater which can ease the mountain from being exploding. To understand the "living Kelud, people may also rely on a role of special "intermediary figure having special spiritual capability to communicate with a supernatural creatures (like spirit or ghost) living in Kelud. This adoring spiritual attitude towards Mount Kelud, in one side could be considered as positive attitude to respect the nature and to live with it in harmony and peace. However, on the other hand relying mainly and so much on the ritual to prevent eruption and having secured and peaceful feeling after fulfilling the rituals, would diminish the significant level of people rational awareness and alert to any possibility of volcano reactivity at any time. The success of disaster risk reduction program depends on understanding of people social vulnerability, including comprehending properly the traditional beliefs of the local people and approaching it in synergistic manner with rational empirical evidences.
Longitudinal Assessment Of Regional Council On The Policy Of Children In Need Of Protection In A Town, Wakayama Prefecture, Japan

Kazuko Yamada
Kazuko Yamada; Rie Maeuma; Ikuharu Morioka; Naomi Kitano
Wakayama Medical University
Japan
moriokai@wakayama-med.ac.jp

In recent years local government in Japan has conducted a child consultation as well as the child counseling center. Family precipitating child abuse has often many kinds of problems, such as financial problems, problems on marital or family relationships, and physical or mental problems of parent own. To solve such problems, it is important for various kinds of institutions and many persons in charge to work in partnership with support to the family.

Ministry of Health, Labour and Welfare, Japan has enshrined a regional council on the policy of children in need of protection (regional council) into law in 2004, and has made it easier to coordinate on such problems.

The regional council is now established across the country and managed as the core of support for child abuse. However, it has problems on the management because too many registered cases.

The aim of this study was to analyze the longitudinal data on cases registered in the regional council. These results will enable us to manage the regional council better and effectively

The subjective local government was A Town, Wakayama Prefecture, Japan. The population was about 13,000 and the number of births was about 90 in 2014.

The researchers explained the aim and methods of this study to the persons in charge of the regional council orally and in a writing form, and then asked the mayor of the Town in written form to give them the allowance to collect the data on cases registered in the regional council.

The researchers asked the person in charge on the established year, subjects, the institutional composition of the council, a form of meeting, the frequency of the meeting and so on. They also asked him the type of child abuse, the grade of severity, the age of the subject and the institution supporting the case by the case registered in the council.

General information on the regional council The regional council was established in 2005. The subjects were children in need of protection, and the ones in need of help. Convention was held one time, working-level talks were twice, and meeting for consideration of individual cases were four times in the year of 2014.

The regional council was composed of nursing teachers at elementary and junior high schools, a chief of a childrens day-care center, a principal of a kindergarten, a person in charge of facilitating the maternal and child health, a childrens social worker, a chief of the children's social worker, a director of the social welfare council, a director of the regional child-rearing support center, a
director of the Education and Learning Department, a director of the youth center, a counselor of the child counselling center, a person in charge of maternal and child health of the Prefectural Health and Welfare Department, and a director of the Community Safety and Criminal Affairs Division of the police.

The number of registered subjects The number of total registered subjects showed the increasing tendency. The types of child abuse were physical and neglect. There was no mental and sexual abuse. The support for the neglect is often held at home and continues for a long time. This may lead to the increasing number of the neglect cases.

The number of registered subjects by grades of severity varied from severe to slight and the number of slight cases showed the greatly increased. Corresponding to the enhanced measures of the regional council, the support may be expanded for the slight cases.

As to the number of registered subjects by ages, the number of younger cases showed the greatly increased, and the cases of junior high school were less.

As to the number of registered subjects by the institution to support, more institutions tried to work in partnership with support to the family. It is difficult to say this is because the cases with various kinds of problems are increasing, or because the institutional cooperation itself is advanced. The advanced cooperation leaves no doubt.

In conclusion, the number of cases registered in the regional council during the last 8 years showed the increasing tendency. Especially neglect cases as the types, younger cases by the ages, and slight cases by the grades of severity have the greatly increased. More institutions work in partnership with support to the family. In the further study, it is necessary to analyze the details about support to the registered cases, and the relationship between the case conference and condition of the registered case.
Measles Outbreak In Sleman District, Indonesia, 2014 Implications Of Religious Belief In Non-Vaccination

Nur Aini Kusmayanti
Nur Aini Kusmayanti; Riris Andono Ahmad; Berty Murtiningsih
Field Epidemiology Training Program Universitas Gadjah Mada Indonesia
Indonesia
nurainikusmayanti@gmail.com

Measles cases in Indonesia have increased significantly in recent years. Some outbreaks have been associated with groups that refuse vaccination due to religious belief.

This study aimed to describe measles outbreak in Islamic School in Sleman district, Indonesia, in September-December 2014.

A descriptive outbreak investigation was conducted for the 81 measles cases reported. Data were collected on demographic characteristics, clinical history, treatment, vaccination status and contact tracing during the incubation and transmission periods. WHO's clinical standard case definition was used. Data collection was conducted through household interviews of all children who did not attend school during the outbreak.

81 cases were identified and 7 cases (8%) were lab-confirmed in 21 November 2014. The index case reported symptom onset occurred on 26 September 2014; however, the case was only identified on 31 October 2014. The first reported case was admitted to intensive care on 22 October 2014, this was the 17th case. Most cases were 1-4 years old (48%), male (54%), did not get vitamin A as a treatment when suffered from measles (47%), and unvaccinated (67%), of which 20% were unvaccinated due to religious belief that the vaccine was not halal. Vaccine efficacy was 82%. Due to strong opposition, no outbreak response immunization campaign was conducted. Outbreak control involved educating parents about immunization by an involved religious leader, case isolation, and forced holidays. As a result of these measures, no new cases were reported.

This investigation suggests that this outbreak was hard to be controlled, cases were late reported and most of them did not get appropriate treatment. Government should conduct an evaluation about this. Vaccine preventable disease outbreak control strategies need to take into account religious issues, especially for measles. Social distancing and mapping for population at risk area can be alternatives solution.
Measles Outbreak Investigation In The Jangkar Village, Situbondo County, Indonesia 2015

Hasirun

Hasirun; Arief Hargono; Fransisca Susilastuti
Airlangga University
Indonesia
run_fetp@yahoo.co.id

Measles is one of the infectious diseases that afflicts mostly children but can also affect adults. It can lead to severe outbreak, especially in areas with lower immunization coverage. In 2013, there were 8419 measles cases in Indonesia and East Java Province was the one of the province with the highest measles cases. One of measles endemic area is Situbondo County where in 2012 there were 32 cases; an increase of 82 cases in 2013 and decline in 2014 only 15 cases. On the fourth week of April, Situbondo District Health Office received reports of W1 and C1 from Jangkar Health Center that 7 measles cases were detected in Jangkar village.

The objectives of this study were to ensure exceptional incident occurred in the Jangkar village, to determine the distribution of measles cases, to determine risk factors such as measles immunization status, cold chain, high risk village and vulnerable population, identify the source and method of transmission, and to develop recommendations and prevention of outbreaks.

This research used a descriptive epidemiological study. Population in this research was all children aged <15 years in the Jangkar village, Situbondo County. The instruments used were immunization register, C1 and C2 forms. Analysis of data used univariate analysis.

Measles outbreak occurred in the Jangkar village, Situbondo County, on 4th week of April. The symptoms were included fever (100%), cough (100%), runny nose (93.33%), red rash (100%), red eyes (20%), oral mucosa lesions (6.67%). Age of measles cases ranged between 1-14 years old where most cases occurring in the age of 1-4 years were 9 cases (60%). Result of laboratory test showed that 5 measles cases were IgM positive. Of the total cases, 67% were men and 33% were women. Attack rate in the whole population at risk was 0.18%. Attack rate of men was greater about 0.28% than women. The age group 1-4 years was the biggest age attack rate around 1.97%. Based on the immunization status, there were 13 cases or 86.67% not given measles immunization previously.

Risk factors detected were immunization coverage over the last 5 years under 50% and in 2013 it reached 58.2%. Therefore, Jangkar village was a measles-risk area. Management vaccines was not optimal, especially in the distribution of the vaccine to others using ice thermos. There were only two vaccine carriers in Jangkar health center. Vaccine efficacy in the 1-4 age groups was the most cases occurred about 78.57%. This vaccine efficacy was lower than 80%. The refusal of immunization occurred in Krajan sub village because people were afraid of their children would experience the same symptoms such as fever after the DPT immunization then impacted on measles immunization in 9 month age. The early warning system of outbreak was not optimal to detect as early as possible the presence of disease trends in society. Case of measles with malnutrition status had complications of diarrhea, red eye, oral mucosal lesion. There were two index cases of transmission suspected where the first case named BH living in different sub village with other cases, however was not known exactly how he infected other cases. Then the second index case in Nurul Bahri
kindergarten named ABR. Moreover, the environmental condition in that kindergarten was less. Then, measles spread through neighboring contact, household contact, the contact play. Actions performed were treatment, disposal of vitamin A and counseling to the community.
Measuring Hospital Efficiency Through Pabon Lasso Analysis: An Empirical Study In Kemang Medical Care (KMC)

A Heri Iswanto
A Heri Iswanto
Kemang Medical Care
Indonesia
hri.isw@gmail.com

Hospital is most costly in health care system. Provisions of optimal service require that hospital administrators identify hospital efficient performance based on relevant indicator.

This study used the Pabon Lasso Analysis to access the efficiency of KMC and to identify strategies toward an improving efficiency KMC.

This cross-sectional descriptive study involved all the four years performance of KMC Hospital. Data on Average Length Of Stay (ALOS), Bed Occupation Rate (BOR) and Bed Turn Over (BTO). Data collected from 2011 2014 based on medical record report.

The overall average length of stay and bed turn over represents a satisfactory level of efficiency. ALOS 2 3 days and BTO 42 47 times. KMC hospital located in Zone II because BOR only 28 31%. This study represents good satisfactory level of efficiency KMC demonstrated, short stay, high turnover but low occupancy.

This study showed the KMC hospital has generally high performance as indicated by Pabon Lasso Analysis. The administrator should find a strategy for measuring bed occupation rate for increasing hospital efficiency.
Misconception And Misuse Of Corporate Governance Terminology In Indonesian Hospital Law

Gunawan Widjaja

Gunawan Widjaja
Universitas Tarumanagara
Indonesia
widjaja.gunawan@yahoo.com

Each state has its own history on the development of hospital, eventhough nowadays for many different reason, all countries in the world is talking about governance in hospital. In Indonesia current situation, Indonesian Hospital Law does not specifically refer to corporate governance, however in the Elucidation of Article 29 para (1) point r of the Hospital Law, it is implied that corporate governance was part of hospital governance. Meanwhile the conception and terminology of corporate governance in Indonesia belongs to corporation, especially public corporation. In such conception, all corporations must comply with Corporate Law, including all corporations with line of business of hospital.

The aim of this research is to prove that there has been a misconception of corporate governance terminology in hospital management. This research tries to contrast the conception of corporate governance used in Hospital Law against the Corporate Law.

This research uses qualitative research. This research uses secondary data, with triangulation to maintain validity of result. This research also uses comparative legal method to understand the concept of corporation and corporate governance in order to explain the application of corporate governance hospital.

Result of the research shows that Hospital Law has misinterpreted the status of hospital. It has mislead the function of hospital, which shall be seen as a line of business of a corporation. It means that hospital must be seen as part of the corporation as organisation and not vice versa. This misinterpretation has caused misconception and misuse of corporate governance terminology in Hospital Law. Researcher recomends to correct the misinterpretation.
**Mobile Clinics**

**Yu-Feng Wu**  
*Wei-Li Juan; Jia-Ling Hou; Yu-Feng Wu; Hui-Ping Lin; Shu-Chen Kao; Chi-Hung Lin*  
Department of health, New Taipei City Government  
Taiwan (R.O.C.)  
AI3533@ntpc.gov.tw

In New Taipei city, medical resource shortages are seen in 12 rural areas, specifically in 307 junior high schools and elementary schools with 12,240 children from first to ninth grades.

Oral health tour services can reduce decay rates in rural areas.

Through mobile clinics—oral health tour vehicles have provided oral checkups, treatment, and health education to 181 schools with 7,758 children.

From 2012 to 2014, the decay rate of rural areas in this city decreased from 57.4% to 50.8%, a decline of 6.6%. Obviously, oral health care tour services can significantly reduce decay rates of children from rural areas.
Modeling The Impact Of Climate Change On Dengue Hemorrhagic Fever Incidence In The City Of Padang, West Sumatra, Indonesia

Defriman Djafri

Defriman Djafri ; Fauziah Elytha
Faculty of Public Health, Andalas University
Indonesia
defku@gmail.com

The city of Padang lies close in the equator line on the west coast of Sumatra, a natural habitat for potential agents of DHF infection. It has a potentially and vulnerable area with the high morbidity and mortality of DHF. In tropical regions, a distinct seasonal pattern in DHF outbreaks is evident in most places where monsoon weather patterns predominate.

The objectives of the study were to access and develop a model of the projected impacts of climate change on dengue hemorrhagic fever incidence in the city of Padang, West Sumatra, Indonesia.

A time series analysis model was used for statistical model with the equation DHF incidence = constant + trend + cyclic/seasonal effect + climatic factors was applied to demonstrate the effect of tropical climatic variability on DHF incidence. The monthly data were used in the analysis from January 2001 December 2014 were collected from various relevant governmental departments.

Result of model showed that an increase in DHF incidence was predicted with climatic factors and seasonal effect, but the escalation of cases trend was increased in early year. The modeling offers the potential for improving and preparing the control program and consistent planning of public health interventions.
Monitoring Team Methods Can Be Increase Implementation Regional Regulation No 5 Year 2008 Above SFA and SRA In Surabaya

Kurnia D Artanti
Kurnia D Artanti; Santi Martini; Kusuma S Lestari; Hario Megatsari; Sri Widati
Faculty of Public Health, Airlangga University
Indonesia
kurnia.dwi.z@gmail.com

Regional regulations regarding Smoke Free Areas (SFA) and Smoke Restricted Areas (SRA) have been implemented in Surabaya since 2009. SFA is an area where individuals who is prohibited to conduct activities related smoking like as: producing or making cigarettes; sell cigarettes; organized cigarette advertising; promoting cigarettes and cigarette use; and SRA is an area where individuals are permitted to smoke in limited areas. The management must provide a designated smoking room and put No smoking signage in other areas. After 5 years, it seems that implementation of the policy is still weak. Monitoring Team has been established by decree of the mayor. There should be a monitoring team in sector departments but not all of them work actively.

The aim of the study was comparison between the facilities with the monitoring team and non the monitoring team

This was case control study. Case is places have categories health facilities which there are monitoring team. Control is place have categories other facilities which there are not monitoring team. A survey of 300 places that were categorized as Smoking Restricted Areas and Smoking Free Areas under the Regulation were conducted. Cluster Random Sampling was used based on different areas of Surabaya (East, West, Center, North, and South). Data collection was done by an observation check list. The variable consist of people are still found to be smoking inside the building, there are smoking room, Ashtray, cigarettes butts and cigarette sellers were found in the Smoke - Free Area.

The study founded that The place have categories which there are monitoring team significantly affect the implementation regulation. They showed that signage no smoking (p < 0.00; OR 3.58), No found smoker (p<0.00; OR 13.68), There are not smoking room (p<0.06,OR 1.85), No Smell cigarette smoke (p<0.00; OR 32.33), No found Astray (p<0.00; OR 2.9), no found cigarettes butts (p<0.00; OR 5.6) and cigarette sellers (p<0.00; OR 3.69) significantly. Conclusions: Monitoring team very important to increase the effectiveness of the implementation. The regulation needs to be disseminated regularly and continuously among local government officials.
Nursing Care And The Deathbed Care Process In Families Living On Small Remote Islands

Yasuko Koja

Yasuko Koja; Takehiko Toyosato; Tamayo Hasegawa; Ayako Kiyuna; Misuzu Takahara; Takao Yokota
University of the Ryukyus
Japan
yasuko@med.u-ryukyu.ac.jp

There are reports on how to spend the care period for the island elderly, but there is little research on how care was analyzed.

Families living on small remote islands who have experienced nursing care and deathbed care were interviewed with the aim of understanding the meaning they attached to those experiences.

The study participants 31 family members were interviewed in November 2011. The questions covered recipients daily life and care status, process until deathbed care. The transcripts were analyzed with the continuous comparison method using M-GTA. This study was approved by the A ethics review board. Eighteen concepts and eight categories were produced from the data analysis. The concepts are indicated with bold text and the categories with italics.

In the process of nursing care and deathbed care by families living on small remote islands, caregiving could be provided on the island if the care recipient had Personal independence and the Burden was mild, but there were Limitations to healthcare on the island. In supporting a Sense of mission for the role of the caregiver, attempts were made to Dissipate the stress of caregiving with services on and off the island, but caregivers sometimes fell into a state of Feeling depleted due to the stress of caregiving. If Mutual bonds were deepened and Patient comfort without resistance to care was obtained, Achieving home deathbed care was possible with the Strong support of doctors on the island. In contrast, when Moving off the island because of disease or sudden change, there was Caregiving confusion in an unfamiliar place off the island, and Movement off the island and caregiving confusion continued until the deathbed amid a sense of tension in which the geographic features specific to remote islands interfered with the caregivers Desire to be present at the deathbed.
Out-Of-Pocket Healthcare Expenditure Among Cham-Malay Community In Cambodia

Hoe Victor CW
Hoe Victor CW (1); Bahrulmazi Edrak (2); Mohd Yusof Kasim (3); Nor Pujawati Mohd Said (4)
1) Centre for Occupational and Environmental Health-UM, Department of Social and Preventive Medicine, University of Malaya, Kuala Lumpur
2) iCOOP College Malaysia, University of Malaya, Malaysia
drvictorhoe@gmail.com

Cham-Malay is one of the minority ethnic group in Cambodia, which accounts for less than two percent of the population. Most of the Cham-Malay are Muslims. There are paucity of research on this group with regards to healthcare expenditure.

The study aims to assess the out-of-pocket healthcare expenditure among this community.

This is a cross-sectional study conducted between September 2014 and January 2015. First the household were selected from the identified province; i.e., Kampong Cham, Phnom Penh, Siem Reap, and Tbong Khnum. All the individual within the household were included in the survey. The interview were conducted by local Cham-Malay trained enumerators. The means and standard deviations (SD) of normally distributed continuous variables and the median and inter-quartiles ranges of skewed variables are presented.

The total number of household surveyed were 343, which consists of community from Kampong Cham (48.69%), Phnom Penh (36.36%), Siem Reap (7.87%), and Tbong Khnum (4.08%). There were a total of 1520 respondents, with mean age of 28.12 (Standard Deviation (SD) 17.16) years, range from 0-89 years. The average household income were USD25.93 (SD 102.13), ranged USD0-1500 per month. There were 87 individuals (5.72%) who seek out-patient treatment in the two weeks prior to the interview. They spend an average of USD4.11 (SD 19.50), range from USD0-150 per individual. There were 169 individuals (11.11%) who were admitted to hospital in the one year prior to the interview. They spend an average of USD146.33 (SD 178.10), range from USD0-700 per individual.

This is the first survey that describe the out-of-pocket healthcare expenditure of the Cham-Malay minority group in Cambodia.
Overview Antifraud Policy In The Implementation Of Indonesia Universal Health Coverage (UHC) Program

Risky Kusuma Hartono, SKM, AAK

Risky Kusuma Hartono, SKM, AAK
Graduate Student Faculty of Public Health Universitas Indonesia
Indonesia
risky_kusuma@yahoo.com

According to Ilyas (2010), Fraud in USA, which has the advanced health insurance management and policy, still reaches 10%. In Indonesia, as one of the most corruption countries in Asia Pacific occupied the 16th place, has a high risk of the health insurance fraud. KPK (2013) also has investigated some cases involved with a high risk of the implementation of UHC. In this case, has the anti-fraud management made an effort so that the implementation of UHC can be done thoroughly?

To describe and analyze antifraud policy in the implementation Of Indonesia UHC Program

This thesis is a literature study taken from various sources related to the overview anti-fraud policy in the implementation of Indonesia UHC program. The analysis investigated uses the theory of fraud risk management that consists of deferring, preventing, detecting, and reporting occurred in Indonesia UHC.

By creating the regulations of anti-corruption and improving the quality of health services before the implementation of Indonesia UHC, the government is able to defer the fraud. The second is preventing by building the internal team (BPJS of health) and the external team (DJSN, OJK, and KPK). In addition, the Ministry of Health also makes the regulation of anti-fraud for the implementation of Indonesia UHC (PerMenKes Year 2015 Number 36). The third is detecting it by conducting the research done by the experts form the universities and getting the real fraud data. Finally, reporting fraud that has been analyzed by the analysis team can be conducted by the internal team (BPJS of Health), some input from public and social media. Conclusions: Four theories implemented to fight against fraud in Indonesia UHC are continuously done. It would be better for the government to formulate legislation to the PerPes level, to develop anti-fraud law enforcement, to extend the investigation, and to create transparency fund transaction. Moreover, the Ministry of Health continuously expands the research access and develops the anti-fraud campaign through social media.
Paediatric Drug Use Pattern At The Out Patient Department Of The Teaching Hospital Of Jaffna

Rajendra Surenthirakumaran
Miss Layanthini Somasundaram; Dr. M. Gitanjali Sathiadas; Dr. Rajendra Surenthirakumaran; Dr. Thiyahini S. Navaratinarajah
Faculty of Medicine, University of Jaffna
Sri Lanka
Layanthinisomasundaram100@gmail.com

Paediatric population is the most vulnerable group affected by the health issues caused by the inappropriate usage of medications. Periodical paediatric drug use monitoring is an imperative action to optimize child healthcare by enhancing the therapeutic outcome and alleviating the adverse effects. Collecting information on the existing drug use pattern and interpreting the influencing factors of the pattern are most important to support the drug use in a wise manner. In order to assess the drug use pattern in the Out-Patient Department (OPD), the World Health Organization (WHO) has developed drug use indicators. The manual elaborates twelve core drug use indicators and several complementary indicators. The WHO drug use indicators are widely accepted as a global standard for analyzing the current drug utilization status and problem identification. They are well validated and has been used in many developed and developing countries to explain the drug usage in health care providing institutions.

Study was conducted to assess the appropriate Paediatric drug use pattern at Outpatient Department (OPD) of Teaching Hospital, Jaffna (THJ).

Descriptive cross-sectional study was carried out with systematically selected 1181 paediatric prescriptions among the children below the age of 12 years, who attended the OPD from July to August 2014. Data were collected using data collection forms, which were developed based on the manual for investigating drug use in health facilities by WHO. The core drug use indicators developed by WHO includes the average number of drugs per encounter, percentage of drugs prescribed by generic name, percentage of encounters with an antibiotic prescribed, percentage of encounters with an injection prescribed, percentage of drugs prescribed from essential drug list/formulary and availability of copy of essential drugs list or formulary ; defined complementary indicators including percentage of antibiotics of total number of drugs prescribed, and percentage of prescriptions with the indication were used in this study. Finally, data were entered and analysed by using SPSS-21. Indicators were calculated and compared with other recent publications.

A total of 2903 drugs were prescribed for 1181 paediatric patients. Average number of drugs per encounter was 2.45 while 69.9% (2030) of total drugs were prescribed in generic name. 69.9% (825) of patients were prescribed with at least one antibiotic which was 29.0% (843) of total prescribed drugs. 99.9% (2901) of drugs were prescribed from the essential medicine list. 2.5% (30) of patients were prescribed with an injection. 92.1% of prescriptions were with written indication. Essential medicine list was not available at OPD. In comparison with other studies, this study revealed that the antibiotic prescription rate was high. In conclusion, rational drug use among paediatric population should be encouraged as it is the most vulnerable group affected by the health issues caused by the inappropriate usage of medications.
Paraplegia And Pregnancy

Nadia Mohd Mustafah
Nadia Mohd Mustafah; Noriani Abu Bakar; Aishah Ahmad Fauzi; Norhayati Hussein
Faculty of Medicine, Universiti Teknologi MARA
Malaysia
drnadm@yahoo.com

Spinal cord injury has increased over the years, so as the survival. Survivors continue with their life including in career and interpersonal relationship. Women with spinal cord injury remain fertile after the injury and have equal chance of pregnancy as the able-bodied individuals. However, their disability exhibit different issue on medical and functional aspect of pregnancy and delivery. We discussed on the common issues related to pregnancy and delivery in paraplegic to educate the need of having different approach managing the antenatal and postnatal care.

We describe a case of a 29 year old who had a traumatic spinal cord injury and resultant in high paraplegia in 2008. Two years following her injury, she conceived naturally. She had her antenatal check up at the low risk antenatal center throughout her pregnancy. Despite requiring help for transfer, other activities remained independent. However, she cannot appreciated active labor and gave birth in the toilet.

Pregnancy is relatively safe in women with spinal cord injury (SCI). However, disability related issues can be exaggerated during pregnancy and delivery. Thus, understanding common issues related to this population along with specialized obstetric care will improve the overall outcome of a pregnant woman with SCI.
Pathways To Stunting: Three Cases In Rural Areas Of Indonesia

Syafiq A
Syafiq A; Fikawati S; Oktarinda
Universitas Indonesia
Indonesia
a-syafiq@ui.ac.id

Stunting is in the center of nutrition development stage in many countries, especially low and middle-income countries, 45 million children all over the world have low body height or length for their ages. In Indonesia, around 35% of children under two years old are stunted.

There is a need to understand various pathways that lead to stunting.

In-depth interview and observation were nested in the bigger quantitative and qualitative study conducted in five regions (Sumatra, Java, Kalimantan, Nusa Tenggara and Sulawesi), and covered 10 provinces and 11 districts. A quantitative survey was conducted in 7 provinces and 10 districts, with site selections made to ensure coverage of the varied cultures and religions.

Three cases of stunting among children under two in Indonesian villages were investigated. In the first case, stunting was an implication of unplanned pregnancy, which led to inadequate pregnancy care and low birth weight. Lack of emotional bonding had worsened the situation, which ultimately resulted in poor childcare practices. In the second case, problem started with perceived insufficiency of milk production directly implied pre-lacteal feeding, improper feeding practices, which was compounded by poor sanitation and hygiene resulted in frequent child sickness and reduced appetite. In the last case, despite 6 months exclusive breastfeeding, the child suffered form frequent diarrhea, thus the appetite was reduced and the nutritional cost was high. One notable issue was that mother was unmotivated to cook and prepare food for the child, led to worsening feeding practices.

The three cases reviewed in this study provide detailed description on the various pathways of stunting among children under two in rural areas of Indonesia. Three different early causes, namely unplanned pregnancy, perceived insufficiency of milk production, and frequent diarrheas were responsible for series of negative events led to stunting.
Personal Hygiene, Sanitation And Bacterial Quality Of Food In Preparation And Serving Stages

Kusmiyati
Kusmiyati; Enny R. Sinaga; Wanti; Pius Selasa; Margaretha Telly
Airlangga University, Surabaya
Indonesia
kus1979@yahoo.com

Food safety is well known as a primary need of human being. WHO reports that 70% of diarrhea cases have a strong correlation to contaminated food. More than 90% of foodborne diseases is due to contaminated by microorganism. Poor food hygienic practices are some of factors that contribute to bacterial foodborne disease outbreak. Restaurants play an important role to spread foodborne illness. A number of studies have characterized the prevalence of indicator microorganism in processing environment.

The purpose of this study is to analyze the relationship between the characteristic of the food handler, personal hygiene and sanitation of the restaurants itself during the food preparation and serving to the bacterial quality of food.

The design of the study is Crosssectional. The study was conducted over 3 months in 2013, located in Oebobo District of Kupang, East Nusa Tenggara, Indonesia. The study involved 30 restaurants, 30 food preparation workers, 30 food server, 30 samples of processed food and 30 samples of served food (fried chicken). The data was collected by interview and observation and the E. coli examination in the Provincial Laboratory of Health. The collected data was analyzed by statistical test (Chi-square test and Fisher exact test), values at 0.05 or lower are considered significant.

The study revealed that most of the respondents were educated under senior high school, 2-4 years working experience as food preparation worker, and less than 2 years as food server. The age of food preparation workers is between 30-40 years old, while the food servers are less than 30 years old. 23% of the workers personal hygiene are poor and 7% the food servers personal hygiene also is poor. The sanitation of preparation areas is 10% poor. The laboratory examination shows that E. coli was detected on 30% of the sample of the processed food and 27% of the served food. The statistical analysis indicates the significant relationships (p<0.05) between the level of education with the food preparation workers hygiene practices and E coli in the processed food. There are also significant relationships between the working experience and E. coli in the served food. Whereas the sanitation condition variables in the preparation and serving stage do not indicate significant relationship with the E. coli in the food. The finding of this study indicate that a number of factors are related to bacterial quality of food in restaurant. Other study found that there was a significant difference in food hygienic practice scores between the three levels of education. The hands of a food server play a central role in bacterial transfer among foods. The study of bacterial quality of food associated with various steps in food preparation process may provide the scientific basis for risk management strategies to prevent contamination. Hight risk sanitation facilities could be the entry point of E. coli contamination of food. Based on the result, it requires trainings for the food preparation workers and increasing the monitoring from the health workers to improve the personal hygiene and food quality in the restaurants.
Health warnings have been shown to increase awareness on smoking health risk and subsequent behaviour change. In Malaysia, there are six health conditions with pictorial health warning on cigarette packages since 2009: lung cancer, oral cancer, throat cancer, premature birth, miscarriage and gangrene.

The objective of this study was to determine the relation between pictorial health warning on cigarette packages and knowledge or belief of the health consequences of tobacco smoking among Malaysian adults.

A community-based study was conducted on 4250 individuals aged 15 years and above in Malaysia. Health conditions which were related to smoking were asked to the respondents, i.e. serious illness, stroke, heart attack, lung cancer, oral cancer, throat cancer, premature birth, miscarriage, gangrene, bladder cancer, stomach cancer and osteoporosis. Complex sample design analysis was carried out to determine the prevalence of knowledge or belief of health consequences of tobacco smoking. The relation between knowledge or belief of health consequences of tobacco smoking and the availability of pictorial health warning on cigarette packages was studied.

A total of 96.4% of respondents believed that smoking can cause serious illness. In general, the level of knowledge or belief of the health consequences of tobacco smoking was higher for those health consequences with available pictorial health warning on cigarette packages compared to those without. The knowledge or belief for the respective health consequence was: lung cancer (97.7%), oral cancer (94.9%), premature birth (95.0%), throat cancer (93.6%), miscarriage (91.1%), gangrene (88.6%), stroke (92.2%), heart attack (95.0%), bladder cancer (80.5%), stomach cancer (78.5%) and osteoporosis (72.8%).

Pictorial health warnings have been shown to increase knowledge and belief of health consequences of smoking. Rotating pictorial health warnings is one of the best methods for smoking prevention and control.
Practice Pattern Among Indonesian Doctors

Prastuti Soewondo
Prastuti Soewondo; Ufara Zuswati Curran; Halimah
Faculty of Public Health University Indonesia
Indonesia
prastuti.s@gmail.com

No one knows how many doctors practice in Indonesia. Data on distribution, quality and practice frequency is fragmented and contradictory. The Indonesian Medical Council (KKI) lists 105,000 general practitioners and 28,000 specialists registered in 2015 in contrast to Health Ministry (MOH) estimates of 42,500 GPs and 39,000 specialists. Further evidence suggests human resources for health (HRH) are distributed inequitably in terms of geography, and full-time equivalence. Almost 85% of doctors are concentrated in Indonesia’s more urban and higher income west at the expense of its less-developed east (KKI 2015). At least 60-70% of government health workers also engage in private (dual) practice (USAID 2009). While policymakers hope to boost the GP to population ratio now 0.36 per 1,000 people (MOH Strategic Plan 2015), and well below WHO’s 1:1000 recommendation in 30 of 34 provinces (World Bank 2014) there is countervailing reluctance to accept findings of a national physician shortage, estimated at between 130,000 (TNP2K 2015) and 267,000 (Frost & Sullivan 2012).

This study aims to offer insight into the practice patterns of Indonesian doctors who, where, why, and how much without which policymakers face challenges in achieving universal health coverage (UHC).

A cross-sectional study was undertaken of 380 Indonesian doctors practicing at a reported 657 facilities. Survey respondents were selected through purposive sampling of doctors practicing in settings classed variously as urban, rural, or remote and representing districts in western, central, and eastern Indonesia. Descriptive analyses were conducted, examining respondents by training level (GP and specialist), and their places of practice by level of care (primary and referral), and by facility ownership (public and private).

Most practicing GPs are female (65.73%) and under 35-years-old (58.39%), a trend that reverses among specialists, 53.19% are 36-50 years old and male (63.83%). GPs and specialists exhibit different location practice patterns (p-value <0.001). More than half of GPs (52.80%) practice in one place, 36.71% in two places, and 10.49% at three. These patterns do not vary by region (p-value 0.02). By contrast, half of specialists (50.00%) practice in three places, 26.60% at two, and 23.40% practice at one location. These patterns vary by region (p-value 0.02): Most specialists in western (73.33%) and central (100%) areas practice in multiple places, while a plurality of specialists (46.15%) in east Indonesia practice at one location. Some specialists in rural and remote areas reported dividing their time across multiple facilities when required to do so by the district health office.

Only 9.45% of physicians who work at public primary care clinics (puskesmas) reported practicing elsewhere; more (24.63%) at public hospitals acknowledged moonlighting, which carries possible consequences of competition for time, outflow of resources from the public sector, and conflicts of interest. Among those in private practice, 69.10% reported practicing elsewhere; 43.56% of doctors
affiliated with private hospitals reported outside practice. All doctors cited salary/incentives and convenience as the top two factors for choosing their practice place; beyond these, reasons varied by training level. GPs cited location and completeness of health facilities, while specialists cited these factors with opposite frequency, in addition to employment status, regulations, and challenges.

Specialists tend to work in more places than GPs and exhibit more regional variation, particularly in western and central Indonesia, where specialists tend toward multi-site practice. Doctors who work at public facilities report less outside practice than their colleagues at private facilities, a finding contradicted by earlier studies and anecdotal evidence.
Predisposing Factors That Affect The Use Of Contraceptives In Women Of Childbearing Age In Melayu Ilir Village

Fauzie Rahman
Fauzie Rahman; Dian Muspitaloka
Public Health Study Program, Faculty Of Medicine, Lambung Mangkurat University, Indonesia
Indonesia
fauzierahmankmpk2010@gmail.com

One of the government’s efforts to reduced the rate of population growth through the use of contraceptives in family planning program (FP). The use of contraceptives can be influenced by three factors, namely predisposing factors, enabling factors, and factors that reinforce or encourage. Predisposing factors that influence the use of contraceptives were the number of children, age, and education level

The objective of this research are to describe the predisposing factors that affect the use of contraception in women of childbearing age at the Melayu Ilir Village East Martapura district Banjar Regency 2013

This study used observational analytic design with cross-sectional approach. Data collected by questionnaires which further analyzed by chi-square test. The population was all the women of childbearing age as many as 299 people. The sample that used were 71 people

Most responden t have more than 2 children (70.4%), have a low education level (62%), have the age with a low risk (70.4%), and used contraceptives (73.2%). Based on Chi-square test, showed that there was a relationship between the number of children and age with the use of contraceptives (p = 0.003; 0.003), whereas the level of education was not associated with the use of contraceptives (p = 0.348). The use of contraceptives was related with age and the number of children, while the education level was not related with the use of contraceptives. Therefore, it was necessary to increase the counseling of FP to the mothers to remain active the use of contraception and need to Community Empowerment through Peer Education
Anxiety is a mental health problem that is common in all regions of the world and ranked as one of the illness to have great burden on individuals, families and society.

The aim of the study was to estimate the prevalence of anxiety among the suburban adult population in Negeri Sembilan, Peninsular Malaysia and to identify factors associated with anxiety.

A community based cross-sectional study involving 556 respondents from 5 housing areas in Port Dickson, Negeri Sembilan was conducted in July 2014. Data was collected by face-to-face interview among residents aged 18 years and above in the household using a structured questionnaire. The Patient Health Questionnaire (GAD-7) Bahasa Malaysia version was used to determine the presence and absence of anxiety among the respondents. The prevalence of anxiety was estimated. Descriptive statistics were used. Binary logistics regression, Odds Ratio and 95% Confidence Interval were used to test the association and risk between each factor and anxiety.

The mean age of the respondent was 47.0 ± 16.5 years. Majority were females (56.1%), married (74.5%) and had primary or secondary level education (81.3%). The prevalence of anxiety among suburban adults was 11.5%. Factors significantly associated with anxiety include female gender, individuals who consume alcohol, individuals with financial problem and individuals with problem at work place.

Anxiety among the suburban adult population in Port Dickson, Negeri Sembilan was 11.5% and associated with gender, alcohol consumption, financial problem and problem at work place.
HIV has become an epidemic for more than three decades and remained global health issue. The status of the HIV epidemic in Papua shows a different developments compared to other regions in Indonesia and has been classified as having generalized category.

This research aims to determine the problem of HIV and the association between sociodemographic, co-infections, behavioral, environmental and health services factors with HIV infection in Tanah Papua in the year 2013.

This research is a quantitative study, with a cross-sectional design and use secondary data from the Survei Terpadu Biologis dan Perilaku in Tanah Papua in 2013. The number of sample is 5334 respondents aged from 15-49 years old who are willing to and successfully conduct a rapid test to determine the HIV status.

The results of this research is to find sociodemographic factors that associated with HIV infection in Papua, which are age, education and ethnic; co-infection factors, which is the status of syphilis; behavioral factors, which are knowledge, age of first sex, status of polygamy, circumcision, extramarital sex, sex during menstruation, drunk alcohol before having sex, injecting drug use, and traditional healing with scratching body; environmental factors, which is geographical strata; health care factors, which are availability of condoms, access to VCT and costs of VCT test. Multivariate statistical test indicates that the most associated factor with HIV infection among male respondents is circumcision, however among overall respondents the most associated factor is the costs of VCT test. This research found the risk of HIV infection is higher for respondents around the age of 15-24 years old, higher educational level, origin of Papua, positive in syphilis status, lower knowledge level, first had sex at around the age of 15-24 years old, had one sex partner, lack of circumcision, had extramarital sex, had sex during menstruation, infrequent drunk alcohol before sex, injecting drug use, not making a habit of healing with scratching body, have a difficult access to condom, accessible to VCT, and high costs of VCT test.
Prevention-Related Behavior on Cervical Cancer: A Systematic Literature Review

Sobar
Universitas Andalas
Indonesia
sobar2000@gmail.com

Cervical cancer ranks third on the incidence of cancer is more common in women worldwide, over 80% of cases occur in developing countries. Prevention-related behavior is an important issue to reduce the incidence of cervical cancer. Many primary studies have been conducted in prevention-related behavior on cervical cancer (PrBCC), but no comprehensive literature review discusses about theory, model, variable and statistics test that used.

This literature review aims to identify and analyze the state of the art on PrBCC.

This literature review has been undertaken as a systematic literature review (SLR) to identifying, assessing and interpreting all available primary research with the purpose to answer for specific research questions. In this study, several digital library chosen as primary research source, such as: ScienceDirect, Taylor and Francis, Ebscohost, Proquest and Google Scholar which time of publication within 2004-2015.

Based on the defined inclusion and exclusion criteria in SLR, 47 papers were remained and selected to be investigated further. Analysis of the selected primary studies revealed that 10 theories commonly used with 3 mostly used in research, e.g.: theory of planned behavior, the health belief model theory and integrative model of behavior with percentage are 25%, 21% and 4% respectively. About the variable that commonly used, there are 11 variables beside the behavior variable itself, 4 variables mostly used in primary research model, e.g.: knowledge, intention, attitude and perception with percentage are 33%, 32%, 30% and 30% respectively. Prevention approach have been used in primary research, such as vaccination, screening (IVA and Pap Smear test), behavior based only and mixture method with percentage are 44.7%, 21.3%, 23.3% and 10.7% respectively. The result of the research also identified the statistics test that commonly used as data analytics from the primary research, e.g.: regression, chi-square and t-test with percentage are 51%, 36% and 27.7% respectively.
Prioritization Of Health Problems Using Hanlon-Method-In Salatiga City-Central Java Province, 2013

Prima.K.Hamzah
Prima.K.Hamzah; S.Dewi, H.Kusnanto; D.Widarsih
FETP Indonesia
Indonesia
rimakhamzah@gmail.com

Salatigas City Health Office (CHO) administers public health programs to optimize community health. Health intervention efforts should be based on priority health problems due to resource limitations.

This study, conducted in March 2014, aimed to identify and rank priority health problems in Salatiga City. Findings will support fiscal planning in light of Indonesia’s recent introduction of universal health coverage.

Problem identification was done through several stages: (1) collection of disease incidence and prevalence data as well as previous control program activities (2) direct interviews with program managers and (3) collation of data into an able. Priority health problems were determined using the Hanlon-method, which assesses the magnitude and the seriousness of problem, effectiveness of available solutions and PEARL factors namely Propriety, Economic feasibility, Acceptability, Resource availability, and Legality. Ten health problems were ranked. Priority health problems were determined by five raters who were all CHO staff.

Health problem scores ranged widely (904.92 to 1360.90). From highest to lowest ranking, dengue Fever (DHF) scored 104, the maternal mortality rate (MMR) scored 1275.68, Upper Respiratory Tract Infection (URI) scored 1026.90, tuberculosis (TB) scored 1017.53 and low birth weight scored 904.92. DHF, MMR, URI and TB were deemed priority health problems in Salatiga. The mix of health priorities underpins the importance of programming for both communicable and non-communicable diseases in Salatiga City. Findings were shared with CHO decision-makers to influence budget requests for future fiscal years, and to highlight that both curative and preventive funding will be needed based on the types of health problems prioritized.
Problem Identification Surveillance Acute Flaccid Paralysis In East Java Provincial Health Office With System Approach

Irma Prasetyowati
Irma Prasetyowati; Dinasty Hari Raditya M; Bambang WK
Department of Epidemiology, Biostatistic and population, Faculty of Public Health, University of Jember; East Java Provincial Health Office
Indonesia
irma_prasetyowati@yahoo.com

WHO defines AFP syndrome as "characterised by rapid onset of weakness of an individual's extremities, often including weakness of the muscles of respiration and swallowing, progressing to maximum severity within 1-10 days. The term 'flaccid' indicates the absence of spasticity or other signs of disordered central nervous system (CNS) motor tracts such as hyperflexia, clonus, or extensor plantar responses". Indonesia had signed a polio-free certificate from SEARO In 2014. The possession of the certificate, Indonesia must prove that its region for 3 years was not found cases of polio, and monitoring by surveillance Accute Flaccid Paralysis (S-AFP).

The purpose of this research is to identify the problems of surveillance Accute Flaccid Paralysis (S-AFP) in East Java Provincial Health Office with System approach

This study used a descriptive method. source of data was secondary data and primary data. Technique of data collection used interview and documentation. descriptiv analysis is used with system approach

The Existing problems in Input and process are the capability and accuracy of the surveillance officer is less, the implementation of repeated 60-day visit that is still low, monitoring is still less than the national and local health authorities and others. Feedback is provided not include all the information regarding the performance of S-AFP in each district health office / town. There is only information about the number of cases of AFP In a regular bulletin published 3 months. Recomendation of this study are training of surveillance officer gradually, developot of S-AFP software, give reward and punishment to the surveillance officer.
Problems Identification On The Implementation Of National Health Insurance In Puskesmas Gondokusuman II And Puskesmas Tegalrejo Yogyakarta

Nuryati

Nuryati; Savitri Citra Budi; Nur Rokhman
Medical Record Study Program Vocational College Universitas Gadjah Mada Indonesia
nur3yati@yahoo.com

National health insurance has been implemented since 1st January 2014 by BPJS Kesehatan. Puskesmas Gondokusuman II and Puskesmas Tegalrejo Yogyakarta are part of this program. These health institutions play important part in the implementation of the national health insurance. They are the first entry gate for the patients. There are still many problems found in the implementation of national health insurance, such as: unmatch health institutions, redundant data, system error, and reimbursement problem.

This research identify problems arise in the implementation of national health insurance in Puskesmas Gondokusuman II and Puskesmas Tegalrejo Yogyakarta.

This research is done by using participative observation. Subjects of this research are patients, registrar, nurse, doctor, and cashier.

This research shows the following result: (1) registration of patients start from getting the services queuing number, checking the insurance status, identifying the personal identity, data entry in P-Care system and SIMPUS, deliver the medical record to the health institution. Data entry makes the service time longer. Beside of this, there are still serious problem in the P-Care system and SIMPUS. Some part of the patient data are not yet entered. (2) The report of national health insurance program consist of patient report, top ten morbidity, which are sent to Dinas Kesehatan Kota Yogyakarta monthly. (3) There two billing system, namely: capitation and non capitation. (4) The problems arise in the implementation of national health insurance: patient registration, reporting system, billing system, data processing. These problems are caused by: man (uncompetence staff), materials (various card of national health insurance), machines (unintegrated system between P-Care and SIMPUS, unstable power supply), methods (double entry P-Care and SIMPUS), markets (patient does not understand national health insurance mechanism) and money (no money to integrate the system).
Progam Evaluation Of Diarrhea Disease In Purworejo, 2014

Lucky R. Alma  
*Lucky R. Alma; T.A. Wibowo; Z. Chomariyah*  
Universitas Gadjah Mada  
Indonesia  
luckyradita_fetp2013@mail.ugm.ac.id

Diarrhea is one of public health problem in Purworejo. Diarrhea was ranked fifth the most treated disease in Public Health Centers (PHC) in 2013. The percentage of patients that were treated in 2010-2013 under the national target.

This study aims to evaluate the aspects of input, process, output, and outcome of diarrhea control program in Purworejo.

Descriptive observational study was conducted on Mei-June, 2014 at 16 of 27 PHC. Data were collected using structured interview with questionnaire to the officers of PHC and Health Office of Purworejo.

In input aspect, 50% officers of diarrhea control program work more than five years, 100% officers never got training about diarrhea control program, 18.75% officers had more than three double duty, 87.50% officers didn't have diarrhea control program guideline and 100% officers didn't have Pojok Oralit room. In process aspect, 81.25% officers didn't make planning of program activities, 100% officers didn't supervise to Pustu and PKD. In output aspect, the coverage of patients service was 67.10% of target 100%. In aspect outcome, the incidence rate was 14.36° and the case fatality rate was 0%.

The implementation of diarrhea control program have not been conducted optimally in Purworejo regency in accordance with the national diarrhea control program standard. Researchers suggest to Health Office of Purworejo to held the training or refreshing, distribute diarrhea control program guideline dan give technical guidance to improve public health center officers performance.
Readiness Of The Stakeholders In The Implementation Of Health Insurance Program (BPJS) In 2014

A. Rizki Amelia
A. Rizki Amelia; Reza Aril Ahri; Nurgahayu
Universitas Muslim Indonesia
Indonesia
kikiarizkiamelia@yahoo.co.id

In order to the process of transformation to BPJShealth, PT. ASKES and coordination with various other relevant ministry, and DJSN along with socialization prodesi/organization of health facilities as well as stakeholders various regions throughout Indonesia need to do intensive socialization to the public. Socialization is the key to successful the implementation of JKN regarding the membership of health insurance is currently very low. With adequate marketing socialization needed not only required from membership. But also to get support from various related parties to improve the quality of health services either in the capital city, region, private and other people community element

The aim of this research is, to find out readiness of stakeholders about the health facilities, regulation Process, as well as community understanding about SJSN, BPJS and JKN in the implementation of national health insurance in the city of Makassar.

The method of research is used is qualitative study where data and information is in symptoms ongoing, as well as standard (yardstick) in using the truth in ideal condition where researchers also seeks to explain, describing and interpreting about the readiness of stakeholder in the implementation of Health BPJS in the city of Makassar.

The expected results of this research is this research could be beneficial to parties stakeholders that is have direct role in the implementation of JKN program in the city of Makassar.
Related Determinants Of Non-Cardiorespiratory Fitness On Middle Aged Women In Pancoran Mas Sub District Depok 2015

Mustakim
Mustakim; Kusharisupeni
Public Health Nutrition Department
Indonesia
merpatibali496@gmail.com

The elderly experiencing fairly rapid growth in the future. Physical fitness had been found as predictor to morbidity and mortality to elderly group. Someone who does not fit is often associated with low regular physical activity and causes a degenerative disease and premature death. Someone who is fit will have an effect on body composition (reduction in the levels of fat in the abdomen), improving lipid profile (reduction of triglyceride levels, increases HDL) and lowers LDL, reduces blood pressure and improving blood flow. Besides that, someone who fit will improve psychosocial wellbeing.

This study focused on the physical fitness of middle aged women in Pancoran Mas District, Depok. The purpose of this study was to determine the relations between characteristic, lifetsyle, body composition and nutrititional intake to non-cardiorespiratory fitness.

This study was a cross-sectional design and the data were collected from 134 middle aged women. Physical Fitness was measured by fitness test using hand grip test, sit and reach test, and czuka chair sit and stand test. Other data, food intake was measured by 2 days food recall, physical activity was measured by Physical Activity Scale for Elderly Questionnaire and anthropometric data was measured by microtoise, seca and BIA. The result showed that 72.4 percentage of respondent belonged to unfit condition. The most influential variable were physical activity intake after adjusted by BMI, percentage of body fat, smoking status and vitamin B12 intake.

These results show that middle aged women who had physical activity in the active category has a chance to become more fit 2.382 times compared middle aged woman who had less physical activity category after controlled by variable by percent of body fat, body mass index, smoking status and vitamin B12 intake. This result is different from the research conducted at the homes of elderly Budi Agung Kupang, East Nusa Tenggara which the most influential factor in determining the fitness is nutrition intake of protein, vitamin B12, folic acid, fe and ADL. Moreover, in another study in Puskesmas Arga Makmur District of North Bengkulu shows that diet pattern and work status is the most dominant variable affecting the level of fitness of elderly (Mulyadi, 2005). Differences dominant factor of each fitness-related research in middle aged women can be caused by several things including research methods, then the variables and indicators of fitness of each study. In addition, although comparative study object is in the elderly, but this becomes a prediction of the future, so that interventions can be done early to get to the healthy elderly. Therefore, the difference is quite natural to happen given the many factors enabling the dominant factor in determining fitness in a study.
Relationship Between Age, Sex, Sport Activities, Smoking Status, And Obesity Status With The Incident Of Hypertension (Observational Study In Non-Surgical Inpatient Room Ulin Hospital Banjarmasin Period June-August 2014)

Fahrini Yulidasari
Fahrini Yulidasari; Fauzie Rahman; Lilis Nawati
Public Health Department, Medical Faculty, Lambung Mangkurat University
Indonesia
riniyulidasari@gmail.com

Hypertension is a condition characterized by an increase in blood pressure and provide symptom that will have an impact on the incidence of disease caused by attacking certain organs such as stroke (brain), coronary heart disease (for blood vessels), and left ventricular hypertrophy (to the heart muscle). Based on the results of Riskesdas (2013), hypertension prevalence on age 18 year in South Kalimantan as much as 30.8%. Factors that influence the occurrence of hypertension were divided into two major groups, namely controllable risk factors such as stress, obesity, unbalanced diet, and lifestyle, as well as the risk factors that can not be controlled such as genetics, age, gender, and ethnicity. Based preliminary survey in Ulin Hospital the number of patients with hypertension who served in 2011 as many as 80 patients, in 2012 as many as 181 patients and in 2013 as many as 192 patients.

This research aims to clarify the relationship between age, sex, sports activity, smoking status, and obesity status with the incidence of hypertension in Ulin Hospital Banjarmasin

Research carried out by the method of analytical observation. The project used a cross sectional with sample totaled 97. The research instrument used spreadsheet, microtoise, and scales underfoot. Dependent variable is hypertension, independent variables are age, sex, sports activity, smoking status, and obesity status. Data were analyzed with chi-square test with a level of 95%.

The results showed that 51.5 % of all respondents were classified as low-risk age, 58.8 % male, 64.9 % had a risky sport activities, 76.3% of light smokers, 67 % obese and 61.9 % including hypertension. The results of data analysis with chi square test showed there was a relationship between age (p=0.007), sports activity (p<0001), smoking status (p<0001), and status of obesity ((p<0001) with hypertension. While sex is no correlation with the incidence of hypertension (p=0.455). Besides being a degenerative diseases hypertension also occurred due to living behavior that is not healthy like fatty food consumption and high sodium consumption as well as a result of obesity (fatness), the lack of sport smoking, and the consumption of alcohol.
Relationship Between Dwelling Status And Behavior To Eradicate The Dengue Mosquito Breeding Place Toward Larva Existence In Sekaran Village, Semarang

Lucky R. Alma
Lucky R. Alma
Universitas Gadjah Mada
Indonesia
luckyradita_fetp2013@mail.ugm.ac.id

Sekaran Village is located around the Semarang State University campus which is one of the dense area of students boarding house in Semarang. In 2010-2011, the Larva Free Index in Sekaran Village was the lowest in the dense area of students boarding house of all Semarang. Larva Free Index in Sekaran Village in 2011 was 82.68% of target 95%.

This study aims to explore the relationship between dwelling status and behavior to eradicate the dengue mosquito breeding place toward larva existence.

This cross sectional study used proportional quota sampling. The data collection was conducted in Desember 2012 by structured interviews using questionnaire and observation to find out the larva existence in each dwelling status. Chi square test was done.

There were 105 dwellings studied. The behavior to eradicate the dengue mosquito breeding place in 67 (63.81%) dwellings was classified as poor, and 54 (51.43%) dwellings with larva. The p-value between dwelling status toward larva existence is 0.455, the behavior to eradicate the dengue mosquito breeding place toward larva existence is 0.024 (PR 1.6) and the dwelling status toward behavior to eradicate dengue mosquito breeding place is 0.032.

There was a relationship between the dwelling status and the behavior to eradicate the dengue mosquito breeding place, and there was a relationship between the behavior to eradicate the dengue mosquito breeding place and the larva existence. Researchers suggest the dwelling members to eradicate the dengue mosquito breeding place continuously and sustainably by dividing the chores for all dwelling members in order to suppress the dengue mosquito population so that the risk of dengue transmission can be reduced.
Relationship Between Physical Fitness And Sense Of Balance During Whole-Body Vertical-Vibration Training In Normal And Overweight Young People In Taiwan

Ming-Shu Chen

*Ming-Shu Chen(1.2); Yu-Sheng Laio(2); Chih-yu Hsiang(3); Yi Luo(2)*

(1)Department of Health Management Center, Far Eastern Memorial Hospital, New Taipei City, Taiwan, ROC (2)Department of Healthcare Administration, Oriental Institute of Technology, New Taipei City, Taiwan, ROC (3)Department of Health Promotion and Health Taiwan

tree1013@gmail.com

With changes in diet, increasing numbers of young people are overweight and lack physical fitness. The aim of this study was to investigate the relationship between physical fitness and sense of balance during whole-body, vertical-vibration training in young people. We also investigated the diet and exercise habits of young people with the aim of improving health behaviors.

The aim of this study was to investigate the relationship between physical fitness and sense of balance during whole-body, vertical-vibration training in young people. A total of 54 young people were recruited to the study and were randomly assigned to an experimental (n = 23) or control (n = 31) group. The groups were then subdivided into normal (18.5 body mass index [BMI] < 24) and overweight (24 BMI < 27) groups. The experimental group underwent 12 weeks of systematic vertical-rhythm vibration training sessions, 30 minutes each, 3 times a week. The control group maintained normal daily activities over the same period. In Weeks 1, 6, and 12 of the study, physical fitness (BMI, body fat percentage, abdominal muscle endurance, flexibility, and cardiopulmonary endurance) and balance (timed up-and-go test, single-leg stance with eyes open and eyes closed, 30-second sit-to-stand test, and base of support area test) were measured.

The average age was 21.12 ± 0.85 (mean ± standard deviation) years in the experimental group and 21.14 ± 0.53 years in the control group; 38 participants were female (70.4%). After completion of the 12-week training course, the body fat percentage results in the experimental group decreased from 30.57% ± 6.04% to 28.67% ± 7.45%, the BMI decreased from 23.58 ± 3.37 to 23.39 ± 3.59, the number of sit-ups increased from 28.71 ± 8.96 to 29.30 ± 7.55, the single-leg stance with eyes closed from 18.56 ± 14.70 to 25.06 ± 32.43, and the 30-second sit-to-stand result decreased from 23.29 ± 3.81 to 20.33 ± 4.86. The female participants had statistically significant differences from those of the males in body fat percentage (t-value = 3.9**), BMI (t-value = 2.20*), the number of sit-ups (t-value = 4.19***), the single-leg stance with eyes closed (t-value = 2.22*), the 30-second sit-to-stand (t-value = 2.10*), and the base of support area test (t-value = 2.83**).

This study found that an intervention involving whole-body vibration training had a higher influence on physical fitness in overweight participants than in normal participants. The results for the females were more effective than those of the males for both of the applied fitness indicator and balance assessment indices. Whole-body, vertical-vibration training has the potential to increase body fitness and balance in young people. In addition, young people should be more attentive in controlling their diet and exercise to enhance their physical fitness and health.
Relationship Between Reading Food Label Habit And Other Factors With Buying Milk-For-Toddlers Decision On Parents Of The Students At SDIT Al-Hamidiyah Depok In 2015

Syarifah Aqilah
Syarifah Aqilah; Triyanti; Diah Mulyawati Utari
Departemen Gizi Masyarakat, Fakultas Kesehatan Masyarakat, Universitas Indonesia
Indonesia
newsyarifah@gmail.com

The fulfillment of the nutritional needs in toddlers should be noted because it will affect the growth, development, and health status in the next life stages. Toddlers nutrition needs can be fulfilled from variety of foods, including milk. Milk is one of nutritious food because it contain various adequate nutrient. In fact, toddlers are not like adults because they are not able to choose any food. That is why special attention from a mother is needed. Mothers decisions in buying milk are influenced by various factors. According to Yuliati, et al., (2008), 42.2% mother buying milk for toddler because its nutrition value content that can be seen from the food label on the packaging of milk. Other factors that influence the buying decisions of milk is related to mothers internal characteristics, a source of information, milk brand, milk price, and toddlers nutritional status.

The objectives of this study are to find out whether reading food labels habit and others factors are associated with buying milk-for-toddlers decision or not

This research used a quantitative approach, cross-sectional study design, and data analysis by chi square test. Instruments that used are questionnaire to get answers from respondents regarding the examined variables, i.e. the decision of buying milk-for-toddlers, mother's education and nutritional knowledge, family income, the habit of reading food labels (composition, nutritional value information, claims/health messages, serving recommendation), the influence of the information sources, brands, and prices; semi quantitative food frequency questionnaire to support the data of toddlers energy intakes; and weight scales to get body weight and calculating toddlers weight-for-age. Data collection conducted in April May 2015 on 107 mothers who have toddlers at SDIT Al-Hamidiyah, one of the Islamic Elementary School, in Depok, West Java, Indonesia. The place selection of this research is related to high family income targets so that they have ability to buy milk for toddlers. Not only has the purchasing power, they can also purchase various types of milk with various consideration. The research criteria of inclusion are mother from grade 1 to grade 5, have toddler age 1 to 5, and buy milk for their toddler, while the exclusion criteria are the mothers who have toddler with certain allergies.

90.7% respondents are highly educated mother, who have finished at least diploma degree with the most education level is bachelor. The average respondents family income is 15 million rupiahs per month. There are 53.3% mother buy milk-for-toddlers in large quantities per month, while 46.7% mother buy milk-for-toddlers in a little amount per month. Categorizing purchases of large amounts of milk is when the purchase of milk per month is more than equal to 2143.0 grams of milk powder or 15 liters of fresh milk per month. Average milk consumption nationwide until 2013 are powdered milk 0.0492 kg/capita/month, baby powder milk 0.0359 kg/capita/month, and fresh milk 0.0056
kg/capita/month (Food Consumption Bulletin, Ministry of Agriculture, 2013). From these data it can be noted that the purchasing milk by respondents is higher than national milk consumption. The percentage also higher than the research conducted by Yuliati (2008). This may be caused due to a difference in the characteristics of the sample. On this research, mothers education and family income levels tend to be higher so they tend to buying milk in large quantities and they also tend to have a refrigerator to store fresh milk.

Statistical analysis results shows significant relationship between reading nutritional-value-information label with buying milk-for-toddlers decision (p-value: 0.05). Odds Ratio values show that respondents with good habits in reading the nutritional-value-information-label have 2.644 times greater chance to buying milk in large quantities compared to the respondents with less good habits. The results of this study are in line with research that conducted by Ali and Kumar (2011) which mentions that the respondents with the characteristics of the high educational level and income tend to pay attention to the nutritional-value-information-label on food packaging in purchasing food. Respondents tend to argue that the information label of the nutritional value makes them decide on buying milk-for-toddlers. This is related to the perceptions of the respondents who stated that listing nutritional-value-information-label on the food packaging is important.

Statistical analysis results on the influence of information sources also shows significant relationship with buying milk-for-toddlers decision (p-value: 0.00). Odds Ratio values show that respondents who affected by information sources have 4.3794 times greater chance to buying milk in large quantities compared to respondents who are not affected. Kotler & Keller (2014) mentioned that the process of purchasing product start when the consumer gets stimulus to aware the needs. Not a few consumers who have only a little information about the product, so that consumers should and will be looking for additional information about the product. In this research, the source of the information include friends, husbands, family, health workers, and or mass media such as television, newspapers, magazines, radio, and the internet. The trend on this research in line with Anggraini (2012) which mentions that parents with highly exposure to advertising/information about milk associated with toddlers milk consumption. Yuliati et al. (2008) also mention that the more information sources expose the mothers with information about milk gives a greater chance for mothers to buy milk-for-toddlers.
Relationship Between The Level Of Knowledge Of Anemia And Body Mass Index (BMI) With Anemia Status Observational Studies In Adolescent Girl Junior High School Level In Banjar Regency 2014

Vina Yulia Anhar
Vina Yulia Anhar; Atikah Rahayu; Fahrini Yulidasari
Lambung Mangkurat University
Indonesia
anharvinayulia@gmail.com

Adolescent girls are a group that at high risk level of suffering from anemia caused by the level of knowledge about anemia and nutritional status are seen from the results of BMI. Based on data from Banjar District of Health Office, the prevalence of anemia in 2012 was 27.29%. A research is needed to see the relationship between the level of knowledge about anemia and BMI with anemia status in adolescent girl junior high school level in Banjar Regency.

The purpose of this study was to describe the relationship between the level of knowledge about anemia and BMI with anemia status in adolescent girl junior high school level Banjar Regency.

This study was analyzed using quantitative methods with observational analytic design through cross-sectional approach. The population of this study was 6684 junior high school students in Banjar Regency. Sampling technique using purposive sampling with inclusion criteria. Total sample was 173 respondents. Instrument of this research using questionnaires, spreadsheet, scales underfoot, mikrotoise and digital hemometer. Independent variables were the level of knowledge about anemia and BMI, while the dependent variable was anemia status.

From 173 respondents note that of the 12 respondents (15.0%) which have high levels of bad knowledge anemic. Of the 68 (85.0%) of respondents who have a poor level of knowledge is not anemic. A total of 13 respondents (14.0%) who have a good level of knowledge anemic. Of the 80 respondents (86.0%) who have a good knowledge level is not anemic. It can be seen that there is no relationship between the level of knowledge with anemia status of young women (p-value = 1.000).

Young women who have a good level of knowledge has a chance 1.086 times risk of anemia. Statistical test results indicate that, the higher the teenager's knowledge about things that are associated with anemia it is possible to suffer from anemia. The results are consistent with research Hapzah (2012) which states that there is no relationship between the level of knowledge of the status of anemia in adolescents (p-value = 0.258).Knowledge of anemia is one of the factors that may affect the status of anemia in adolescent girls. As is the knowledge of anemia which starts from ever heard the term anemia, anemia sense, the cause of anemia, signs or symptoms of anemia, due to anemia, how to prevent and treat anemia, hemoglobin level is said to anemia and food containing Fe. Determination of food consumption can teenagers based on their knowledge about nutrition, in this case information about anemia. Teens who have a good level of knowledge will have the will to apply nutritional knowledge in the selection and processing of food, so food consumption can be provided as needed. From 173 respondents note that as many as 14 respondents (13.3%) who had normal BMI is not anemic. A total of 91 respondents (86.7%) who had abnormal BMI, not anemic. A total of 11 respondents (16.2%) who had a normal BMI anemic. A total of 57 respondents (83.8%)
who had normal BMI is not anemic. From that result (BMI) it can be seen that there is no relationship between the level of knowledge with anemia status of young women (p-value = 0.766) and girls who have an abnormal BMI has 1.254 times the risk of developing anemia. Results of this study supported by Farida (2007) which showed that there was no correlation of IMT with anemia status (p-value = 0.204). It is causing a lack of correlation between BMI with anemia status allegedly because of levell of nutrient intake in adolescents girl. The level of consumption of nutritional anemia affect the status of the respondents (girls). The possibility of anemia can be caused by the lack of nutrient intake level that facilitate the absorption of iron, so the effect on the nutritional status of adolescent girls. Adolescent nutritional status is a condition of the body that arises due to the balance between intake and expenditure of nutrients. Various physiological changes that occur in adolescence, assessment of nutritional status in adolescents need special attention. Assessment of nutritional status can be known through anthropometric measurements (BMI).
Relationship Between The Maximal Avoidable Speed And General Reaction Time, Lifestyles And Injury Among The Kindergarten Children

Kunihiko Miyamoto
Kunihiko Miyamoto; Yasuko Namura; Nobuyuki Miyai; Ikuharu Morioka
Osaka Aoyama University
Japan
moriokai@wakayama-med.ac.jp

In Japan, the number of injury at schools is increasing. The incidence of bone fracture at elementary schools is increasing and has doubled in four decades. As one of the background of increasing injury, the decreased exercise ability is pointed out in both genders.

We have focused on the collision of child, one of the causes of bone fracture and sprain. To clarify the cause of collision, we have developed the device which reproduces the collision scene with a rolling ball. This device has enabled us to measure the collision avoidance ability and to obtain indexes, such as a contact occurrence rate and a maximal avoidable speed.

We have tried to clarify the relationship between the contact occurrence rate and eating habits, stress reactions, lifestyles, exercise, and injury among school children (46 APACPH). However, it is still unclear the factors related to a maximal avoidable speed.

In this study, we measured the indexes of collision avoidance ability among the kindergarten children and tried to clarify the relationship between the maximal avoidable speed and lifestyles, general reaction time and experience of the injury. These results will enable us to make the better health education in kindergartens for preventing the collision of the child.

The subjects were 53 boys and 46 girls of two kindergartens in Osaka Prefecture, Japan. The survey was done in February, 2015.

This study was approved by the Ethical Committee of Osaka Aoyama University. Written informed consent was provided by all guardians of the subject.

The collision avoidance ability was measured by using our apparatus. The general reaction time was measured by the measuring equipment (TAKEI T.K.K.5408). By a self-administered questionnaire survey, we asked the parents (and other guardians) their childs eating habits (eating habit, attitudes toward a meal, food taking, etc.), stress reactions (fatigue, headaches, and gastrointestinal pains), lifestyles (daily exercise, wake-up time and bedtime), experience of exercise, and experience of the injury (bone fracture, sprain, blow, wound, burn, etc.).

The subjects were divided into two groups by the mean value of the maximal avoidable speed by each gender. They were: high maximal avoidable speed group (high ability to avoid the ball) and low maximal avoidable speed group (low ability to avoid the ball). The two high maximal avoidable speed groups of both genders were combined into high group, and the two low maximal avoidable speed groups of both genders were into low group. To compare the mean values, t test was used. To
compare the prevalence of the category, the chi square test was used. A p value <0.05 was considered to indicate statistical significance.

The mean of the maximal avoidable speed was 2.65 (standard deviation 0.51) m/s in boys, 2.48 (0.49) m/s in girls. There was the significant difference between the both genders.

The high group was consisted of 50 children and the low group was consisted of 46 ones. The general reaction time was evaluated by the mean value by each gender. Those who showed the values less than the mean (quick response) was 32.6% in the low group and 68.0% in the high group. There was a significant difference. The maximal avoidable speed was related to the general reaction time. They may show the legerity of the child.

Among the eating habits, those who had breakfast before 7:30 AM were 43.5 % in the low group and 38.0% in the high group. There was the significant difference. Skipping the breakfast (low group 6.5%, high group 10.0%), dinner before 7:00 PM (low group 54.3%, high group 64.0%) did not show the significant difference. Among the attitudes toward a meal, those who often talked about the meal with families were 60.9 % in the low group and 36.0% in the high group. There was the significant difference. Pleasant meal (low group 58.7%, high group 70.0%) showed no significant difference. As the food taking, those who consumed the milk 4 days and more in a week were 56.5% in the low group and 70.0% in the high group. There was a significant difference. The maximal avoidable speed is also related to early breakfast and frequent drinking milk among the eating habits. This may results from the fact that milk contains vitamins much and is more suitable than spots drink after exercise. The reason why those who often talked about the meal with families were lower in the high group is unclear. Further research is necessary to clarify it.

Among the stress reactions, fatigue (low group 43.5%, high group 36.0%), headaches (low group 6.5%, high group 6.0%), and gastrointestinal pains (low group 43.5%, high group 26.0%) showed no significant difference.

Among the lifestyles, daily exercise in clubs (low group 37.0%, high group 50.0%), daily exercise in homes (low group 15.2%, high group 20.0%), wake-up before 7:00AM (low group 26.1%, high group 34.0%), and bedtime before 10:00AM (low group 82.6%, high group 86.0%) showed no significant difference.

Experience of exercise (low group 32.6%, high group 30.0%) showed no significant difference. Experience of injury twice and more (low group 56.5%, high group 68.0%) showed no significant difference.

As the conclusion, in order to prevent a collision, it may be also important to improve the eating habits.
Problems of stunting and wasting is closely related to nutrition and health problems of pregnant and lactating mothers, newborns and children under two years of age (baduta).

This study aimed to examine the relationship between macronutrient intake (energy, protein) with stunting in baduta, history of birth, exclusive breastfeeding, and infectious diseases at the Puskesmas Tamalate Makassar.

This research uses the Analytic observational study design was cross sectional Study, which looked at the relationship of stunting with the variables studied and measured at the same time. The population in this study was the son Baduta and samples were taken of 130 children Baduta. Sampling technique using accidental sampling. Data retrieval Food intake was measured using a food recall form 2 x 24 hours and food models that result in comparison with the RDI, exclusive breastfeeding history and the history of birth and infectious disease was measured using a questionnaire, while the nutritional status of stunting was measured directly by using the height Microtoice.

The results of the study will be analyzed using SPSS and to use Nutry food intake survey, and were analyzed using univariate, bivariate chi-square and multivariate regression. The results of the study with the bivariate analysis showed that there was no relationship between birth history \( p=0.473>0.05 \), a history of exclusive breastfeeding \( p=0.238>0.05 \), history of infectious disease \( p=0.425>0.05 \), and macronutrient intake (energy \( p=0.937>0.05 \) and protein \( p=0.849>0.05 \)) with the incidence of stunting. The results of the bivariate analysis showed no relationship between the variables that can not be analyzed further the multivariate analysis which will be seen that the dominant variable affecting the incidence of stunting. The conclusion of this study that there is no relationship between a history of birth, exclusive breastfeeding history, history of infectious diseases, and macronutrient intake with the incidence of stunting. Suggestions for the results of the study suggested that mothers or prospective mothers should pay attention to nutritional status during pregnancy, exclusive breastfeeding seek to avoid infectious diseases and providing adequate amounts of food intake. It is intended that the child can grow and develop optimally.
Reported On About Healthcare-Art Program For Disabled Children Families In The Local Community

Tamayo Hasegawa

Tamayo Hasegawa  
University of Miyazaki  
Japan  
tamayo_hasegawa@med.miyazaki-u.ac.jp

The Japanese government currently is promoting home medical care. The number of people who take medical care at home is increasing. The number of child patients is also increases but the home care system is not systematized. One of the issues regarding home medical care for children include the related burden on their families caused by continual anxiety and daily care. Physical and psychological health for families are crucial in improving home medical care systems for children in Japan. From 2004, we have developed and now practice a program to continuously promote physical and psychological health for families. We call the program "the Healthcare-Art Program. Main characteristic of the program is using art for healthcare.

The purpose of this report is to introduce our Healthcare-Art Program keeping in mind the importance of this program for families who are carrying out taking their child care at home.

The subjects are families of child patients utilizing home visiting nurses. The time of study is August 2012. The type of art using were music. We ask home visiting nurses to invite families to the program. The details of program included are 1. a music performance by amateur musician, 2.making a musical instrument, 3.musicians and participants play in together. This was followed by a mini festival including Japanese traditional stalls. We recorded the program on DVD and photos and also interviewed some participants about the program.

After the program finished, we made for record of the event and considered the impact of the program upon the attending families. We maintain the safety standard for the child patients by keeping sufficient staff and keep the rest rooms sanitary. We explained that this program is a part of our research and received agreement about keeping a record from participants. The number of participants were 40 (13 families). The number of volunteer for musicians was 24, care staff volunteer number was 46.

Among qualities we noted in the participants were 1. Child patients had smiles on their faces when making musical instruments with their siblings and friends together; 2. Participants joined in the play freely. Children and parents sang together, clapped their hands and danced their bodies; 3. Musicians and participants played together using musical instruments or moving their bodies and participated as an entire group; 4. Parents had a chance to notice their child growth by observing their children joining in several programs; 5. Participants had many chances to communicate and exchange both their anxieties and advice with each other.

Some research regarding the parents of disabled children said that parents feel constant anxiety and isolation from society and repeated the crises. Its important as a countermeasure to foster exchange with other people and create an environment in which they can express their feeling, suffering and
burdens. Because the Art-Program was designed to create independent activity, participants could feel comfortable with the open style, communicate with others freely and express themselves. In shows that Art-Program provides a chance to make friendships easily.

Families have limited time and freedom when caring for their childrens medical needs. It is difficult to have a chance to go outside with all family members because of their daily routines.

Our Healthcare-Art Program provides a safe environment for child patients by including nursing students and teachers as staff. The Art-program provides a chance to go outside for disable children and families together and to feel refreshed in their daily life.

The Healthcare Art-program effects on the families caring for disabled children included: Participants can join in freely and make use of their own time. It can help make friendships through the experience of participating together for a short time. Participants are in the same situations, so they can speak about their daily anxieties and difficulties from their heart. So they can get advice and sympathy from others and thereby decrease their troubles in daily life. In other words the Healthcare-Art Program has the effect of maintaining the familys psychiatric and physical health.

It also possibly an enables continuing family support both in their own homes and in the community. Our future research goal is to create a systematic way for families, especially fathers, to participate more easily that benefits both families with child patients and the community.
Reproductive Health Behavior Among Adolescent Girls In Rural Areas, South Sulawesi, Indonesia

Sitti Patimah
Dr. Sitti Patimah, SKM, M.Kes ; dr. Ida Royani, M.Kes
School of Public Health Universitas Muslim Indonesia; School of Medicine Universitas Muslim Indonesia
Indonesia
imhasudirman@gmail.com

Early marriage on girls are more prevalent in rural than urban areas, which can have negative impacts on reproductive health, nutritional status of mothers and fetus (MoH, 2013).

This study aimed to assess the knowledge, attitude and practice of reproductive health on female adolescent in rural areas.

Cross-sectional study was conducted with on girls (601 samples of 610 populations) from class X in five Senior High School at Maros District South Sulawesi. Nine people do not participate in the study due to illness and was not present at the school at the time of the study. Data were collected using a structured questionnaire and analyzed by correlation test.

Almost half (44.9%) of the subjects had relatively low reproductive health knowledge. Girls who had never heard or know of reproductive health (15.5%). Many girls did not know that reproductive health includes reproductive organs and functions (27.8%), early marriage can cause reproductive health problems and disorders of pregnancy (52.9%), deviation of sexual behavior resulting in sexually transmitted diseases (42.9%). Many girls (54.1%) have a negative attitude towards reproductive health whom were answer agree that early marriage (<20 years old) does not endanger reproductive health, pregnancy and fetus (35.6%). The subjects answered disagree (48.4%) that early marriages increase the risk of maternal death. Reproductive health practices of girls that were not good (37.9%). Most of the girls (62.7%) had been dating and performing risky sexual behavior such as holding hands, kissing, cuddling and making out when courting (7.2%). Knowledge of reproductive health girls were significantly correlated with attitudes by 41.4% (r = 0.414; p = 0.001) and practices by 12% (r = 0.120; p = 0.003), whereas the correlation between attitudes to the practice of female adolescent reproductive health was not statistically significant (r = 0.079; p = 0.052).
Result Based Financing As An Option Of Proposed Payment Model

Mardiati Nadjib
*Mardiati Nadjib; Hendri Hartati; Dini Dachlia*

Center for Health Research Universitas Indonesia
Indonesia
mardiatinadjib@gmail.com

Currently health system in Indonesia relies on input-based financing such as payment for salaries, or fee-for-service payments for service used by patients. Salaries are paid regardless the employee/staff performs productively or not, regardless of whether the desired health outcomes are achieved or not. Performance-based financing (PBF) or Pay-for-Performance (P4P) or RBF, linked payments with performance

There have been some projects focusing on effort to reduce and prevent low birth weight, childhood stunting, and malnourishment of children in certain areas in Indonesia. Most project targeted villages in provinces where rates of stunting and low birth weight in infants and children up to two years old. To ensure that program achievement is successful as expected, linking payment and staff performance become crucial. RBF might be a good option to implement for the proposed project related to reduce stunting and malnutrition, as well as other public health programs.

The aim of the paper is to develop proposed payment model for health center staffs related to the achievement of malnutrition reducing program at community level. The proposed model shows considered the legal feasibility, organizational/ technical feasibility, monitoring and evaluation, and payment scheme.

We did literature review to assess any experience with RBF in Indonesia and other countries. Stakeholders consultations were also carried out in selected provinces of Nusa Tenggara Barat, West Java, Nusa Tenggara Timur. Assessment at local level were resulted options of the RBF that linked with existing local policies, health system and financing scheme. The study was done in 2013. The result was submitted to the MOH to be piloted.

There were some initiatives on innovative projects related to nutrition or performance based financing in Indonesia. Cordaid and NICE projects represented an initiative to improve provider performance in NTT and NTB. Using these approaches, RBF could potentially used to pay salary and incentives for staffs of the malnutrition and public health programs. Alokasi Dana Desa or ADD is another feature of financing scheme to finance local initiatives related to public health programs. An experience from NTB showed the success of the model to ensure access of the village people to health care. Another scheme called TPP (Tunjangan Peningkatan/Penambah Penghasilan) or Additional incentives to increase staffs performance was also having potential acceptance as an RBF model, funded by the local government. We proposed a RBF model to be piloted by a project in the area of malnutrition. The schemes were developed in regard to the level of implementation: village/subdistrict (health center staffs) or district (DHO and HC staffs). Strong commitment from the local government is required to ensure that the model will be sustained and even be used as the basis to achieve the SPM (Standar Pelayanan Minimal) or Obligatory Function of the local government, to monitor achievement of the targeted performance. Funding to support the incentives can be
proposed from either central or local government, or even both. For example, central government fund is potentially used to support outreach program activities, while ADD or TPP that funded by the local government can be proposed to finance provider incentives at the village, health center and DHO level. To avoid duplication with other payment i.e. for curative care provision (will surely obtained capitation payment for primary care under Universal Health Coverage or Jaminan Kesehatan Nasional/ JKN scheme), the RBF initiative is proposed to focus on certain intervention(s), in this regard is nutrition program. We could use indicators such as the MOH program on the first 1000 days of Life. To meet the RBF related to nutrition program intervention, this proposed model is focusing on nutrition components and performance of personnel who are dealing with the targets. There are three important functions in the model: fund holders, regulators, and providers. Midwife at the village level and nutrition staff or TPG personnel in health centers are personnel who engaged with the scheme. We consider involvement of community, in this regard cadre is incentivized under PNPM GSC. Verification process is done by cadre(s) from posyandu or PNPM. Independent verificator(s) can be people from outside institution hired by the scheme or from nutrition section of DHO. Payment for personnel is in this model is calculated based on target indicator to be achieved. Recording and reporting become critical as the basis for the payments. There are two type cohort books: cohort for baby and for mother, informations includes all relevant characteristics of the baby and mother. Both books are managed by the village midwife. In this proposed model, direct payment to bank account at village level might be difficult, it could be easier if payment is made by DHO to health center(s), under an agreement between funder and local authority. Challenge is Cordaid model requires flow of fund outside governments system. If we propose this for the Model, it will need clear procedure, how it works and collaborate with province and district, what the roles and functions of each entity.
Hypertension is a serious health problem today is called the silent killer. Based on data Salatiga Health Department, prevalence of hypertension increased from 38.28% up to 50.37% in the year 2014. A variety of risk factors and determinants that influence hypertension. Uncontrolled hypertension causing heart attacks, strokes, kidney disorders.

This study aimed to identify risk factors of hypertension in Salatiga.

This was a cross sectional study with simple random sampling. Responden was 422 people, the selection is done by simple random. Primary data were collected by questionnary and interviews in 17 Posbindu. Inclusion criteria: age 20-65 years old and have complete data in medical records. Exclusion criteria: mental and physical disabilities, pregnant. Data were analyzed using chi square.

The subjects were 422 respondens, 74 males (17.54%). Patients with hypertension was 215 people (50.95%). The significant risk factors are cooking oil consumption (OR= 1.3; 95% CI (1.07-1.65), doing exercise OR= 0.74; 95% (CI=0.59-0.92).

Cooking oil consumption and doing exercise are risk factors for hypertension in Salatiga. The prevalence of hypertension in women is higher than men because the most of populations in Salatiga are female. Our recomendation was to prevent using waste cooking oil had been used for multiple time and to do an exercise regularly.
Risk Factors Assessment Of Diarrhea On Slaughter House Worker In Bogor 2013

Fajaria Nurcandra
Fajaria Nurcandra; Rini Handayani
Student of Master Program of Epidemiology/Faculty of Public Health, Universitas Indonesia
Indonesia
fnurcandra@gmail.com

Diarrhea is a symptom of a disease associated with digestive due to infectious pathogens and chemicals as a reaction of the body to remove the infection. Based on WHO's data in 2007 was taken along 2005, 1.8 million people died due to diarrheal. Moreover, in United States, a disease caused by major pathogens are estimated cost up to US $ 35 billion/year in medical expenses and lost productivity. In Indonesia on 2010, the incidence rate is 411/1000 person. The prevalence of diarrhea in West Java is the 9th highest which is 10.2%.

This study aimed to determine the relationship individual characteristic with diarrhea in chicken slaughter house workers in Bogor on 2013.

This study was a case-control study. The case group was workers who suffer from diarrhea during June 2013, while the control group was worker who doesn't suffer from diarrhea during June 2013. The number of samples case group were 37 subjects and the control group were 37 subjects. The data used is primary data that collected using a questionnaire. Variables in this study were age, sex, education, and monthly income. Chi square analysis and analytic software of SPSS 17.0 were used.

The results of bivariate analysis showed significant association between gender (p value = 0.004; Odds ratio = 4.76; 95% CI 1.72 to 13.16) and monthly income (p value=0.002; Odds ratio=0.203; 95% CI 0.076-0.544) with the incidence of diarrhea. This study showed that gender and monthly income were found as significant factors of occupational diarrhea also monthly income was found as protecting factor.
Risk Factors Associated With Rheumatoid Arthritis In Agam Public Health Centers Palupuh In 2014

Fauziah Elytha
Fauziah Elytha
Andalas University
Indonesia
elytha12@gmail.com

Rheumatoid arthritis is a disease that many suffered by the people in the world. The prevalence of rheumatoid arthritis sufferers in Indonesia reach 31.3% and sufferers 27.5% gender women. The prevalence of rheumatoid arthritis in kabupaten agam worth 7.7% with the highest prevalence in the work area namely puskesmas palupuh 22.4% 2013.

This research aims to understand the relation of the risk factors of rheumatoid arthritis at the age of women in the work area puskesmas palupuh 2013.

This research using design case control. The population in this research are women who suffer from rheumatoid arthritis in the work area and puskesmas palupuh has visited puskesmas palupuh months mei-juli from 2014. Sample consists of 38 cases and 38 control with matching event age. The sample collection is done with simple techniques random sampling.

The result showed that variable are associated with arthritis reumatoid scene namely physical activity the ordi = 4 ( p = 0.007, 95% 1.3-11.9 ) work the ordi = 3.5 ( p = 0.01, 95% 1.1-10.6 ) and contraceptive usage hormone the ordi = 0.02 5 ( p = 0.01, 95% 1.0-8.2 ) while variable smoking and caffeine consumption not related to the incident with arthritis rheumatoid. Based on the results of research that we risk factors associated with an occurrence arthritis reumatoid is strenuous physical activity, the use of contraception device and hormonal. It is hoped the socialization about health centers to increase the use of contraception device hormonal and training of technology appropriate for.
Risk Factors Of Stunting Of Under Five Years Children In The Working Area Of Muara Tiga Puskesmas Pidie District

Zulhaida Lubis
Septiani, Zulhaida Lubis, Rasmaliah
Faculty of Public Health University of Sumatera Utara
Indonesia
idaulinas@gmail.com

Stunting is one of chronic malnutrition problems, measured by TB/U indicator and caused by multi-factors. Nationally, the prevalence of stunting is 37.2%, including serious public health problems. The risk factors for stunting in balita (below five year-old children) were parenting pattern, infections disease such as diarrhea, and ISPA (upper respiratory tract infection), life-birth weight, and exclusive breastfeeding.

The objective of the research was to find out the risk factors for the incidence of stunting of under five years children

design of research was case-control which the population was 70 stunting balita and 70 non-stunting balita conducted in the working area of Muara Tiga Puskesmas Pidie District. The data were gathered by conducting observation and interviews with mothers who had balita as the respondents using the questionnaire. The gathered data were analyzed by using univariate analysis, bivariate analysis with chi square test, multivariate analysis with multiple logistic regression analysis and the Population Attributable Risk (PAR) with the significance interval of 95%.

The result of chi square test showed that exclusive breastfeeding (p=0.009, OR=4.170 CI 95%; 1.443-12.048), eating pattern parenting (p=0.04, OR=2.138 CI 95%; 1.085-4.212), health care pattern (p=0.021, OR=2.433 CI 95%; 1.192-4.963), and self-hygienic pattern (p=0.024, OR=2.361 CI 95%; 1.174-4.750). The result of multiple logistic regression showed that the most dominant factor was exclusive breastfeeding (Exp (beta)=3.667 CI 95%; 1.250-10.758). The result of Population Attributable Risk (PAR) showed that exclusive breastfeeding was 59% means the incidence of stunting in balita could be forestalled by eliminating risk factors do not provide breastfeeding with exclusive breastfeeding.

The risk factors for the incidence of stunting were exclusive breastfeeding, eating pattern parenting, health care pattern and self-hygienic pattern. It is recommended that health care providers to seek to form a family aware of nutrition (Kadarzi) and provide counseling about breastfeeding newborn babies with exclusive breastfeeding in order to decrease the incidence of stunting in under five years children.
Risks Factors Of Home Physical Environment To Pulmonary Tb Bta (+) Events Lamuru Community Health Centers Bone

Alfina Baharuddin
Alfina Baharuddin; Ulfa Sulaeman
moslem university of indonesia
Indonesia
alfina.riyadi@gmail.com

Home environment is one risk factor which cause the incidence of pulmonary TB, particularly in home physiological fulfillment because UV rays from the sun can kill germs tuberculosis, other than that the sun can also reduce excessive moisture that can prevent the development of TB germs inside home enough sun direct lighting is very necessary. Data from Lamuru community health center in 2010 has recorded 93 patients with pulmonary tuberculosis, in 2011 recorded 70 patients, and in 2012 recorded 147 people and in 2013 there were 104 patients with pulmonary tuberculosis. The purpose of this study was to determine the risk of environmental conditions on the incidence of pulmonary tuberculosis in Bone regency include household contacts, ventilation, room condition, lighting and occupant density.

This type of this research was an observational study using case control design. Population is a pulmonary tuberculosis patients that has been registered in patients card registration in Lamuru health centers. Population in this study were all patients with pulmonary tuberculosis were recorded in registration cards Lamuru health center patients aged 15 years old and above amounted to 104 people. samples in this study were patients with pulmonary TB who’ve been to the clinic Lamuru as the case group and the neighboring people as a control group. sampling technique in the group of cases is simple random sampling. large sample obtained based on cases and controls were 96 respondents with ratio 1: 1. processing and data analysis using SPSS program does is univariate, bivariate with ODSS test Ratio (OR)

The results showed that there are relationship between household contacts of events (OR = 6.366). The results of observations conducted in patients with TB that most respondents carelessly throw their phlegm. It can affect the spread of TB bacteria through the air besides TB patients by air besides the patient does not have its own room (isolation). There is a significant correlation with the incidence of pulmonary TB ventilation (OR = 2.364). This is because the majority of respondents have a closed vent. Although the measurement results qualify but the ventilation force on the walls of houses on stilts made of wood, bamboo and the floors with densities are not too tight as well as with the floor. Besides meeting house walls and ceilings are between 30 cm that allow air exchange can take place properly. There was no significant relationship between kamarisasi with pulmonary TB incidence (OR = 1.591), and this is because the majority of TB patients do not have their own rooms this is one of the factors of contact at home. There is a significant relationship between exposure to the incidence of pulmonary TB (OR = 2.926). This is due to lighting homes have a role against the development of TB germs. Therefore, pulmonary tuberculosis patients and families should be aware to open their windows or air vents every day and take advantage of the sunlights if their home gets too dark because TB germs will live well in the dark and damp. density of inhabitants who do not qualify is not a risk factor (OR = 1.195). based on research that has been carried out
home physical improvement is a necessity, improvement in the investigation and extension of contacts at home. Each renovation/ house building needs to consider home sanitation aspects and improving hygienic and healthy living behavior.
Risky Sexual Behavior And Unwanted Pregnancy Among Adolescents In Indonesia

Sarah Handayani
Sarah Handayani; Ike Anggraeni
University Muhammadiyah Prof DR HAMKA (UHAMKA)
Indonesia
sarah_panji@yahoo.com

Prevention of unwanted pregnancies related to the quality of the future of human resources. Previous research from some countries proved that the impact of unwanted pregnancies do not only related to the mothers but for the babies too. Risk adolescent are the vulnerable group with the unwanted pregnancies. They have a risky behavior but have a low knowledge and practice to prevent pregnancies.

In attempting to achieve the aim of the study, a number of key objectives were identified: 1) to determine the prevalence of unwanted pregnancy among risk adolescents, 2) to determine the background characteristics of risk adolescents, 2) to determine the sexual behavior of risk adolescents, 3) to determine the contraceptive knowledge and practice of risk adolescents, 4) to determine the media literacy, talked sexual matters and peer pressure of risk adolescents, 5) to determine the smoking and drugs behavior of risk adolescents, 6) to determine which variables most associated with unwanted pregnancies.

The analysis was based on 1,353 risky adolescent, those who ever had a sexual intercourse from 10,980 respondents. Data from a demographic and health survey conducted in 2012 in Indonesia were used never married men in the age of 15-24 years. A conceptual framework that outlines independent variables of the unwanted pregnancies was employed including the background characteristic, sexual behavior, contraceptive knowledge and practice, value of virginity, media literacy, smoking, drugs, peer pressure and talked sexual matters with friends friends, family, teacher, health service provider and religious leader. Cross-tabulations and logistic regression were used to compare characteristics and contextual factors among them.

Unwanted pregnancies among men sex partner were 8.7%. The median age of the men interviewed was 20.46. The majority of them were in the age group of 20-24 years (35.7%) and their age at sexual intercourse for the first time were also in group age 20-24 years (84.6%), about 46.7% were in senior high school and lived in urban (56.3%). Most of their reason for the first sexual intercourse were curious (56%), with their girlfriend (89.6%) and most of them did not use any method to prevent pregnancy (61.1%). From their last sexual intercourse, 64% of them had in the last day, week and month. Their knowledge about pregnancy and contraception were mostly bad (59.2 %) but 82.7% of them still value their partners virginity. Most of them (79.8%) were smoking, 15.6% ever tried drugs, 52.5% drink alcohol. Most of them (54.8%) read the newspaper, listen to the radio and watches television at least once a week, 69.3% of them had high peer pressure. Talked about sexual matters with some reliable person were also asked, friends (68.7%), mothers (12.5%), father (9.7%), siblings (18.9%), relatives (24.2%), teacher (40.7%), health service provider (23.4%). Among the
independent variables, last time they had sexual intercourse, drugs, talked sexual matters with mother, father and siblings related to the unwanted pregnancies.

The multivariable model with Multiple Logistic Regression Test at 95% confidence level showed that: 1) drugs with a prediction coefficient of 1.942 which indicates that men who consume drugs have unwanted risks pregnancy 2 times greater than those who do not consume drugs, 2) Frequency of sexual intercourse with beta coefficient of 1.841 which indicates that men who had more frequent sexual intercourse (day and week) had risk 1.8 times bigger than those who less frequent (month, week). 3) Talked about the sexual matter with mothers found to be a protective factor against the incidence of unwanted pregnancies. Those who communicate about sexual problems to their mother can protect unwanted pregnancy 1.9 times bigger than those who did not.

Sex education programs at the school should offer early from elementary school and given as their step of development. Parents should also open their communication with their adolescent, especially about reproductive health.
School Based Lifestyle Intervention Programme (Mybff@School): Baseline Physical And Clinical Characteristics Among Overweight And Obese School Children In Putrajaya.

Abqariyah Yahya
Ruziana Mohd Zin; Muhammad Yazid Jalaludin; Abqariyah Yahya; Nur Zati Iwani Ahmad Kamil; Fuziah Md Zain; Janet Yeow Hua Hong; Rusidah Selamat; Zahari Ishak; Abdul Halim Mokhtar and Wan Nazaimoon Wan Mohamud.
University of Malaya
Malaysia
abqariyah.yahya@ummc.edu.my

Paediatrics obesity epidemic has spread globally, especially in countries undergoing economic transition. MyBFF@school is an interventional programme introduced as a curriculum activity in Malaysian schools specific for overweight and obese students. The present programme carried out by schools such as physical education and curricular activities are meant for all students and not targeted to overweight and obese students. Hence, this programme aimed to assist overweight and obese students change their lifestyle, reduce their body mass index (BMI) and fat mass, and remained motivated to be fit and healthy. MyBFF@school was carried out after school hours, at the school premises with parental permission and in agreement from the Ministry of Education and the school authorities. To describe the baseline clinical and physical characteristics of MyBFF@school participants.

MyBFF@school was a pilot study conducted from February 2014 to June 2014 in selected primary and secondary schools in Putrajaya. Obese and overweight students were selected based on CDC 2000 growth chart. Eligible and consented participants from the intervention schools underwent MyBFF@school programme for 16 weeks in addition to the regular school programmes. MyBFF@school comprise of 3 types of intervention modules which includes sports modules, nutrition module and psychology module implemented together as a package. Each module was developed by expert within the study group. Assessments were done at baseline and week-16 after the intervention. The outcomes measured from this study were anthropometric measurement, body composition analysis and clinical examination by paediatricians. Fasting blood was also collected to measure glucose, insulin, triglyceride and lipid profile. Ethic approval was obtained (NMRR-13-439-16563) and study complied with International Conference on Harmonization Guidelines for Good Clinical Practice (ICH-GCP) and Malaysian Guidelines for Good Clinical Practice.

A total of 425 students participated in this study in which 237 (55.8%) primary school (aged 9-11 years) and 188(44.2%) secondary schools (aged 13-17 years). There was about equal distribution among boys and girls with total of 214(50.3%) and 211 (49.7%) respectively. Mean BMI z-score was 2.66 and 2.37 for primary and secondary school students respectively. It was shown that 1 in 2 students had acanthosis nigricans. Among primary school students, 0.6% had hypertension, 2.3% had diabetes mellitus (DM) with 26% impaired glucose tolerance (IGT), 30% had low HDL, 12% had high triglycerides (TG) and 43% had insulin resistance. As for secondary school students, 1.7% had hypertension, 1.6% had DM with 25% IGT, 30% had low HDL, 12% had high TG and 47% had insulin
resistance. In addition, metabolic syndrome occurred in 13% and 10% of the primary and secondary school students respectively. In conclusion, childhood obesity is associated with significant health problem such as metabolic syndrome, diabetes mellitus, hypertension and dyslipidaemia. Therefore focus should be centred on preventive efforts in childhood obesity.
Adolescence is a period when the sexual maturity started. Most of 63 million teens in Indonesia are vulnerable to do risky sexual behavior. Unhealthy sexual behaviors lead on adolescent reproductive health problems. In Semarang, adolescent reproductive health problems are still occurs, such as, unwanted pregnancy, abortions, and STIs. Nevertheless, adolescents do not have sufficient knowledge to protect themselves from potential sexual risk behavior. Adolescents knowledge on reproductive health is sometimes not relevant to their behavior. Some consider schools and teachers as a part that able to provide the information about ARH. However, not all schools are able to provide comprehensive ARH education.

This study aims to determine the relationship between status of schools, number of students, teacher training experience, and school support with the implementation of ARH education in senior high schools in Semarang.

This research is a quantitative research with cross sectional approach. Schools which become sample were 46 senior high schools. Analysis of the relationship between variables used chi square test.

The results showed that there is no correlation between school status, number of students, and teacher training experience with the implementation of ARH education in senior high schools in Semarang. While the statistical tests indicate a relationship between school supports with the implementation of ARH education. School supports through the fund, as well as through the funding and permissions. Principals who have more attention to ARH problems tend to give greater support to the implementation of ARH education.

To improve the implementation of ARH education in schools, schools need to collaborate with public health centers and parents.
Sectors' Budget Analysis On Nutrition Effective Interventions For Reducing Stunting In Sikka District

Serlie K.A Littik  
Serlie K.A Littik; Adriani Lomi Ga; VAMA Chrisnadarmani  
Nusa Cendana University  
Indonesia  
serlie.kal@gmail.com

Stunting is a predictor of the low quality of human resources. According to WHO, Indonesia is the fifth biggest country in stunting numbers globally, with reached 36.8 of its under five was stunted in 2007. Sikka District is one of the districts in NTT Province with high prevalence of stunting (49.6).

To identify sectors budget in Sikka district, on effective nutrition intervention for reducing stunting

Document study of the sectors budget focus on District Government Budget Source (APBD II) from 2010 to 2012. Effective interventions referred to the Evidence-based Interventions from Lancet Nutrition Series 2008. Data was collected, and analyzed with pivot excel

Results indicate that stunting was not yet a priority for District Government. In 2010, budget for nutrition effective interventions from related sectors was IDR246,856,842 (1.89% of District Budget). It was deteriorate with IDR71,931,062 (0.41%) in 2011, and IDR107,545,900 (0.34%) in 2012. Government commitment on health and education improvement, should parallel with efforts in reducing stunting, through prioritizing its budget for nutrition effective interventions which scientifically approved such as improve practice on appropriate of Infant Young Child (reduce stunting 17.2%), Zinc Supplementation (15.5%), Hygiene promotion (2.4%). In reducing stunting, health sector effort is not enough. The efforts should come from related sectors to converge and integrate their efforts and budget in addressing this problem, to obtain better result. Participation for all stakeholders (pregnant women and families; health staffs; Professional organizations, academia, religious leaders, community leaders and government) is indeed essential. District decision makers commitment on reducing stunting, should be translated into regulation and policies completed with sufficient budget for scientifically approved effective interventions.
Selection Of Alternatives Aspect House Condition In Handling Tuberculosis (TB) In The Province Of Gorontalo

Kholis Ernawati
Kholis Ernawati, Qomariyah, Artha Budi Susila Duarsa, Nita Ismayati, Aslichan
University of YARSI
Indonesia
kholis.ernawati@yarsi.ac.id

Pulmonary TB disease, is still a public health problem. The risk of transmission of each year is calculated using indicators Annual Risk of Tuberculosis Infection (ARTI) in Indonesia is considered quite high and varies between 1-3%

Risksdas in 2010 said that the prevalence of TB in Gorontalo ranks fifth after Papua, North Sulawesi, Banten and Jakarta. While on Risksdas in 2013, the data TB in Gorontalo Province ranks fourth after West Java, Papua and Jakarta.

Theory Analytic Hierarchy Process (AHP) developed by Thomas L. Saaty. AHP is a measurement that is performed to find the scale ratios of the comparison. In the development of AHP is not only used to determine the priority choices with a lot of criteria or multi-criteria, but also has widespread application as an alternative method to resolve a variety of problems.

Based on the previous explanation then this article will analyze the selection of alternative housing conditions on the handling aspects of TB in the province of Gorontalo with AHP approach.

The research objective was to analyze aspects of the electoral alternative housing conditions in the handling of Tuberculosis (TB) in Gorontalo province

Research conducted in Gorontalo province in June-September 2014. The collection of data to establish a hierarchy of models through indept interviews with respondents from Sub Directorate Director General P2PL TB MoH RI and literature studies. Hierarchical model that was built then used to draw up a questionnaire pairwise comparisons were used to collect data alternative selection. Respondents in the selection of alternatives is 11 people that came from the staff of the Department of Health and health centers in the province of Gorontalo. Data were analyzed with the help of expert choice software version 11.

Alternative TB treatment from the interview with the head of sub directorate Tuberculosis and review of the literature theories about TB risk factors and reports Risksdas 2010 and 2013, the alternative offered TB treatment is the aspect of improving the nutritional status, behavioral changes become healthy behaviors, improve the condition of the house into a home healthy, and improving health care quality. While the criteria used as a consideration is the social, economic, and institutional.

Alternative TB treatment is a top priority is quality health care that is equal to 0.340 and then followed by a healthy behavior (0.252), healthy homes (0.225) and nutritional status (0184) with a degree of inconsistency 0.01 or it can be said that the respondents’ answers are consistent.
Based on the results of data processing of all three criteria behind the selection of the best alternative in Gorontalo TB control program priority is the economy (0.475), followed by social (0.268), and institutional (0.256). The index value of 0.001 inconsistent, meaning that the respondents are consistent with each of the priority choice questions contained in the questionnaire.

Dynamic sensitivity analysis of the results showed that the economic criteria will affect the selection of the best alternative changes to the TB control program in the province of Gorontalo (nutritional status, health behavior, healthy homes, and health care quality).
Selection Of Alternatives In Child TB Treatment Program In Jakarta

Kholis Ernawati  
*Kholis Ernawati, Wan Nedra*  
University of YARSI  
Indonesia  
*kholis.ernawati@yarsi.ac.id*

Tuberculosis children have special problems that are different from adults. TB in children reflects the ongoing TB transmission in the population. TB in the pediatric population is not placed as a high priority by the national TB control program for several reasons including the difficulty of diagnosis, the rarity of transmission of TB children, and limited resources.

Nationally, the TB treatment of children who have been executed which increases the capacity of a quality diagnosis and appropriate case management to implement national standards is ISTC.

Analytical Hierarchy Process (AHP) is a method to help develop a model of decision-making with major equipment is a functional hierarchy with the main input of human perception.

The purpose of this study is to formulate the concept of the development of TB control programs, especially in the area of children Jakarta by considering aspects of social, economic, institutional and technology.

Data obtained from the study of literature, in-depth interviews and questionnaires. Respondents expert is in charge of the TB program at the provincial health office and health center in Jakarta. Research was conducted in December 2013 - January 2014.

The analytical method used is descriptive quantitative and qualitative as well as the Analytic Hierarchy Process (AHP). AHP can be used to solve problems related to the tangible and intangible factors. Data, ideas and intuition can be set by using the logical hierarchy structure. Hierarchy is the order of the factors / elements of the existing problems can be regulated / controlled. AHP data processing using statistical software version 11 expert choice.

The results showed that the best alternative for Child TB treatment program, is to improve the nutritional status of children (0.280), health promotion (0.270), Behavior Clean and Healthy (avoid contact with adult pulmonary TB) (0.235), and which ranks last priority diagnosis and treatment of TB is qualified children (0.215).

The results of the synthesis of the criteria in the selection of the best alternative courses of TB treatment in children, the criteria that the top priority is the economy of the respondents combined (0.320), social (0261), technology (0237), and the last is an institutional priority (0183). Obtaining the results are overall inconsistency is 0.00129 meaning answers from all respondents are fairly consistent because consistency is required in view of the results is <10%.
Sensitivity And Specificity Test Of Food Frequency Questionnaire And 24-Hours Food Recall Based On Food Record In Assessing Energy And Micronutrient Intake Of Pregnant Women

Rani Wahyuhandini

Rani Wahyuhandini; Yayuk Hartriyanti; Nur Aini Kusmayanti
Department of Health and Nutrition, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia
nurainikusmayanti@gmail.com

Food record (FR) has been used as a reference method to validate nutrient intake but requires highly motivated participants. Meanwhile, Indonesia doesn't have standard Food Frequency Questionnaire (FFQ) for pregnant women and 24-Hours Food Recall (FRc) highly depends on respondents memory.

This study aimed to test the sensitivity and specificity of FFQ and FRc based on FR in assessing energy and micronutrient intake of pregnant women

This was an observational cross-sectional study conducted in Kebumen, Central Java, Indonesia in September 2012-January 2013. We recruited 64 pregnant women who can read and writing, did not have any specific dietary therapy, and did not suffering from infectious and degenerative disease. For each respondent, we assessed two times using FFQ, four times using FRc, and three times using FR. We conducted a pilot study for FFQ also involved 15 pregnant women in order to obtain foods and beverages that was commonly consumed in that place.

The sensitivity and specificity of FRc were 75% and 75% in assessing energy intake, 100% and 0% in assessing folic acid intake, 96% and 0% in assessing calcium intake, 100% and 0% in assessing iron intake. The sensitivity and specificity of FFQ were 54% and 42% in assessing energy intake, 100% and 0% in assessing folic acid intake, 100% and 0% in assessing calcium intake, 100% and 0% in assessing iron intake.

FRc is more sensitive and specific in assessing energy intake. Both FRc and FFQ has high sensitivity but less specific in assessing energy and micronutrient intake. Health officer can use FRc in assessing energy intake of pregnant women. However, they still have to develop FRc and FFQ in order to get best questionnaire for assessing micronutrient intake.
As the size of the Malaysian adolescent population continues to grow, the importance of addressing adolescent health grows as well. Despite the fact that adolescent health is beginning to receive more attention at a national level, there are still major gaps in both knowledge and action. Recognizing the significance of adolescents for the growth and well-being of the national population, an expert-led process was conducted to identify research priorities in adolescent health in Malaysia.

The health research priority-setting method of the Tenth Malaysia Plan was used to obtain contributions from members of the Malaysian Clearinghouse Centre for Adolescent Health (MyCCAdH). Members include researchers, policy makers, health care professionals and representatives from various government institutions with extensive backgrounds and experience in adolescent health. In a three-phase process, members were asked to (i) identify research areas from five adolescent health priority areas (mental health, high-risk behaviour, physical health, sexual and reproductive health and nutritional health), (ii) score each research area and (iii) rank the research areas.

A total of 18 adolescent health research areas were established. Eight research areas were identified as important: (i) media influence on high-risk behaviour, (ii) prevention of teenage pregnancy and sexually transmitted infections, (iii) sexual reproductive health status among adolescents with disability, (iv) violence, (v) abortion, (vi) substance abuse, (vii) mental health problems and (viii) nutritional programmes. The priority-setting process for adolescent health research has identified media influence on high-risk behaviour as the top priority since this area was found to be relatively untouched and current.
Severe Preeclampsia And Maternal Mortality: A Case Control Study In Hospital Dr Abdul Moeloek Lampung, Indonesia

Nova Muhani
Nova Muhani; Besral
Universitas Indonesia Indonesia
besral@yahoo.com

Approximately 800 women die per day from complications of pregnancy or childbirth. The main complications which account for nearly 75% of all maternal deaths are haemorrhage 27%, preeclampsia and eclampsia 14%, infections 11%, obstructed 9% and abortion complications 8%. Risk factors for preeclampsia is a maternal age (less 16 years and more 45 years old), primigravida, presence of hypertension before pregnancy, multiple pregnancy, molar pregnancy, obesity, history of preeclampsia in a previous pregnancy, family history of preeclampsia, chronic medical conditions such as long-term hypertension or diabetes. However among the factors found difficult to determine which are the caused of preeclampsia-eclampsia. Severity of preeclampsia is characterized by blood pressure (sistolic more than 160 mmHg or diastolic more than 110 mmHg, proteinuria +2 or more, the occurrence of seizures (eclampsia), visual disturbance, upper abdominal pain, thrombocytopenia, hemolysis, growth retardation, pulmonary edema, and oliguria.

This study aims to determine the predictor severe preeclampsia (assessed by systolic blood pressure, diastolic blood pressure, proteinuria, eclampsia and HELLP syndrome) with maternal deaths in public hospital Dr. H. Abdul Moeloek Bandar Lampung City, Indonesia

This study design using a case-control study, starting with cases of maternal death from severe preeclampsia and control was mother did not die from severe preeclampsia and then look for factors associated with maternal mortality due to severe preeclampsia. This study uses quantitative data obtained from medical records public hospital Dr H. Abdul Moeloek Bandar Lampung City.

Medical records from year 2010 to 2014, there were 72 cases of maternal deaths caused by severe preclampsia but who meet the inclusion and exclusion criteria were 60 cases. The case is severe preeclampsia treated mothers and dying, while the control is severe preeclampsia mother who cared for and lived, a total of 120 patients were taken for control in the same month and year of the case. Sampling controls performed by simple random sampling.

The multivariate logistic regression model, after controlled by maternal age, gravida, gestational age, type of delivery, diazepam consumption, type of residence, employment, and educational level confirmed that HELLP syndrome increase risk of maternal mortality (adjusted Odds Ratio is 12.5 (95%CI= 2.90-53.72), eclampsia have risk 12.1 time higher to maternal deaths (95% Cl = 3.80-38.65), diastolic blood pressure 110-119 mmHg have risk 7.4 time higher (95% CI=1.8-29.2), diastolic blood pressure 120 mmHg have risk 5.5 (95%CI 1.1-23.1), sistolic blood pressure more than 190 mmHg have risk 2.1 time higher (95% CI=0.5-7.4), sistolic blood pressure 170-190 mmHg have risk 1.6 (95%CI 0.5-4.5), proteinuria +3 have risk 4.2 time higher (95% CI=0.3-27.4), proteinuria +4 have risk 3.2 (95%CI 0.5-31.7).
Need to provide treatment in women with hypertension in pregnancy and diet arrangement to protect severe preeclampsia and maternal deaths can be prevented. Provide health education to mothers to use contraceptive method after childbirth, perform comprehensive treatment in cases of eclampsia and HELLP syndrome in accordance with the existing standard operating procedure in hospitals. Need to supervise the health centers with emergency obstetric care facilities in providing antenatal care so that the cases of severe preeclampsia can be prevented and provide pre-referral treatment in women who had experienced severe preeclampsia, so it can be ascertained that the process of referral to hospital is done in accordance with procedures. Improve the implementation and supervision of Maternal Perinatal Audit for reviewing cases of maternal death due to severe preeclampsia. Doing sweeping program of pregnant women who are at risk at each health center, so that pregnant women who are at risk could receive special attention for early detection of pregnancy complications such as eclampsia and syndrome HELLP quickly and accurately.
Severely Wasted And Health Financing : New Autonomous (Expansion Of New Distrcit) Versus Non-New Autonomous Areas

Septyana Choirunisa

Septyana Choirunisa; Asri C. Adisasmita
Faculty of Public Health, Universitas Indonesia
Indonesia
septy.nisa@gmail.com

Indonesia have many provinces and regencies/municipalities. Since decentralization has been ruled at 2001, the regencies/municipalities have to organize their own area autonomously (including their local resources) to solving their local problems. Disparities between each regencies/municipalities then become wider, not exceptionaly disparities in health issues. Beside disparities between rich versus poor regencies/municipalities has not been solved, other 141 new autonomous districts (regencies/municipalities) were formed in Indonesia until 2007 and increased to 201 in 2011. Evaluation on new autonomous areas has been done in economic sector, but evidence in health sector still needed to provide complete information of new autonomous areas.

The aim of this study is to provide information of health status (severly wasted) and health financing (which related with health status) among new autonom areas and non-new autonom areas.

This study was conducted using cross sectional design to compare mean and median difference of health financing/budget and prevalence of severely wasted among new autonomous areas and non-new autonomous areas. Data on health financing were obtained from Ministry of Finance, while data on severely wasted were obtained from the Indonesian Basic Health Research (Riskesdas) 2007. Regencies/municipalities with incomplete data on health financing and severely wasted data were excluded from this study. Total samples included in analysis were 250 regencies and municipalities. Data were analysis using Mann Whitney U to explore and examine significantly of mean and median difference.

The results shows, there was significant mean difference based on new/non autonomy status. Mean of government health financing was higher in non new autonomous areas (old territory) compare to new autonomous areas (mean 52.524,37 million rupiahs vs 31.667,62, p value = <0.0001). This situation may happen because new autonomous areas has dependency with their former area (new autonomous areas formerly was a part of non-new autonomous area). It related with percentage of health financing by total expenditure higher in old territory (9.70% vs 8.30%, p value = <0.0001). In new territory, prevalence of severely wasted was 7.75% whereas in old territory the prevalence was 6.43%. It was related with still limited health facility, health provider, and lower wealth index of areas, and limited resources in new autonomous areas.
Smoking Cessation Among Malaysian Adult Male Smokers: Findings From Global Adult Tobacco Survey (Gats), 2011.

Mohd Azahadi Omar

Mohd Azahadi Omar; Tee Guat Hiong; Muhammad Fadhli Mohd Yusoff; Tahir Aris
Institute for Public Health, Ministry of Health, Malaysia

Malaysia
drazahadi@moh.gov.my

Tobacco use, a major preventable cause of premature death and disease, presently causes more than 5 million deaths globally each year and is expected to cause over 8 million deaths annually by 2030. Quitting smoking can greatly reduce the number of deaths and health-related consequences of tobacco use. This presentation examines the smoking cessation among Malaysian adult male smokers based on the findings from Malaysia Global Adult Tobacco Survey conducted in 2011.

This presentation examines the smoking cessation among Malaysian adult male smokers based on the findings from Malaysia Global Adult Tobacco Survey conducted in 2011.

Global Adult Tobacco Survey 2011 was a nationwide cross-sectional survey using multi-stage stratified sampling method. One individual aged 15 years or older was randomly chosen from each selected household and interviewed using handheld device. GATS Core Questionnaire with optional questions was pre-tested and uploaded into handheld devices after repeated quality control processes. Currents smokers were asked either they had attempted to quit smoking in the last 12 months, smoking cessation methods and also their future cessation plan. Sample weighting and analysis were done using an appropriate complex sample statistical tools.

Among male adult smokers, 48.5% (CI: 43.8 53.2) had attempted to quit smoking in the past 12 months. There was an association between smoking cessation and age group with the lowest among 65 years old and above [31.5% (CI: 18.0 49.0)], number of cigarettes [lowest among smokers who smoked 25 or more stick of cigarettes (30.8%)]. However, there was no association between smoking cessation and residence, ethnic group, education level, age of smoking initiation, time to first smoking when waking and type of smokers (daily or occasional). About 80% of male smokers attempted cessation without assistance, followed by pharmacotherapy (9.1%) and counselling or quit info-line (4.3%). Only 6.2% of male smokers plan to quit smoking within the next 1 month while 17.8% not interested to quit smoking.

Smoking cessation attempts among Malaysian adult male smokers were mainly among younger smokers and those who smoked less sticks of cigarette per day. Majority of them used unassisted methods of cessation and almost 20% of the smokers were not interested in quitting the smoking habits. These factors should be considered in planning and delivery of smoking cessation services.
Indonesia, one of the most populated countries in the world, faces an increase number of elderly people. In 2015, there is 8.5% elderly and is predicted to be 11.5% in 2025. This situation leads to the increase of degenerative diseases, among others: hypertension, diabetes, coronary heart diseases, cognitive disorders and mental disorders that will not emerge as a single disease but can be as comorbid. Moreover, there will be an increase demand of caregivers as well. According to this situation, the identification of the social determinant factors of elderly has an important role to develop intervention programs.

The aim of this study was to analyze the differences of social determinant factors among elderly according to gender, urban dan rural areas.

A comparative study was carried out to 33 provinces in Indonesia using secondary data from BPS-Statistic Indonesia 2013. The variables included in this study were percentage of elderly according gender, education, marital status, occupation, income, living arrangements and house ownership. The normally distributed data were analyzed using unpaired T test and not normally distributed data were analyzed using Mann-Whitney. (α=0.05)

This study showed that the mean percentage of elderly in urban and rural areas were 6.27% and 6.49%, respectively and there was no difference between urban, rural and gender. There were differences in education, occupation and income between urban dan rural areas. In urban area, most of the elderly worked industry and trades, but in rural area, they worked in agriculture. Most of them, had income lower than Rp 2.500.001 especially in rural area. They had their own company, but there was still elderly worked as employees or unskilled laborers and in the family business but unpaid. Most elderly people still married, lived with their spouses, family and with three generations. The precentage of elderly male and female who lived alone were 4.20% and 11.52%, respectively. There was difference in house ownership between urban and rural (88.32% and 94.75%, respectively).

It can be concluded that most of the elderly had low education especially in rural area. There was various occupational hazard among elderly according to their occupation that could contribute to the emergence of disorders besides degenerative diseases. Most of the elderly had low economic status which led to the need of financial support from the member of their family if possible, if not, the government had to develop an income security plan. Moreover, if needed, their spouses or other family members could be their caregivers. Community supports were needed for elderly who lived alone.
Socio Economic And Antenatal Care Factors As Risk Of Low Birth Weight Among Primigravida In Probolinggo, East Java, Indonesia

Sri Sumarmi
Hidayatus Sholiha; Sri Sumarmi
Faculty of Public Health, Universitas Airlangga
Indonesia
msrisumarmi@gmail.com

Low birth weight babies (LBW) is still a problem in developing countries. Low birth weight increases risk of infant mortality and morbidity, impaired immune response, mental disturbances and poor cognitive development. Probolinggo is the one of district areas in East Java with high prevalence of low birth weight, as well as mother and infant mortality rate.

This study aimed to analyze characteristics of social, economic, and antenatal care as a risk factors for low birth weight among primigravidas in Probolinggo District East Java

A case control study was nested in a longitudinal study. Population were 201 women who gave birth in the main study, with total sample of 39 base on a ratio case:control = 1:2 (case=13, kontrol=26). Control was determined by using cluster random sampling using village as a cluster. The independent variables were the age when pregnant, education level, time duration of work, family income, anxiety towards birth, husband support, gestational age, frequency of antenatal care, quality of antenatal care, food taboo, the consumption of herbs, as well as the exposure of cigarette smoke, and alcohol consumption. The dependent variable was low birth weight. Data collecting was carried ot by using a structured questionnaires. Data was analyzed statistically by using logistic regression ($\alpha = 0.05$).

Univariate analysis showed that factors affecting LBW were the gestational age ($p = 0.00$), age at pregnancy ($p = 0.03$), and level of education ($p = 0.023$). Furhemore, multivariate analysis showed that gestational age is the only risk factor of low birth weight (OR = 66; 95% CI; 8.197 to 531.391). Duration of work, family income, anxiety towards birth, husband support, gestational age, frequency of antenatal care, quality of antenatal care, food taboo, the consumption of herbs, tobacco smoke exposure had no effect on low birth weight.

This study revealed that the mother who delivered their babies < 37 weeks of gestation (pre term deliveries) had 66 times greater risk of having a low baby weight compared to mothers who delivered their babies > 37 weeks of gestation (at term deliveries). The other variables were not take a rule as a risk factor due to those variables being controlled in the longitudinal study by using control trial design. This findings confirm that the main research was running well controlled for several confounding variables might affecting the effect of intervention. It implies that beside the main intervention, gestational age is the main factor affecting low birth weight among primigravida.
Socio-Cultural Barriers And Supports To Food Feeding Practices Of Infants And Under Five Children In Urban Area Of Surabaya, Indonesia

Annis Catur Adi

Annis Catur Adi: Feriska Achadiati: Rachmat W. Sitompul
Faculty of Public Health, Airlangga University
Indonesia
annis_catur@yahoo.com

Childhood is an important stage in life cycle. However, disruption of child's growth still commonly occurred. There are three factors as the main causes of malnutrition: infection, insufficient nutritional intake, and inappropriate food pattern. In many areas, problems related to infant and young child feeding practices often influenced by social and cultural factors.

This study was aimed to know social and cultural barriers and supports to food feeding practices of infants and under-five children in urban Area, Surabaya.

A cross sectional design was used and data were collected in three sub districts, Surabaya, Indonesia. Data were collected through household interview to 300 caregivers as subjects and indepth interview to six posyandu cadres and influential key person at grass root level.

The results showed that there were some potential social and cultural factors that may support food feeding practices as shown by relatively high percentage of caregivers who did not throw colostrum (67.7%), and relatively low percentage of caregivers who practiced food taboo (4.0% among infants caregivers and 2.7% among under-five children caregivers), which mainly influenced by the grandmothers belief. The foods which prohibited for infant and child consumption due to taboo were fish, eggs and some kind of fruits. Whereas social and cultural barriers to infants and child feeding were giving pre lacteal foods (54.7%), and early introduction of foods other than breast-milk (33.3%). Social and cultural factors which may support food infant and child feeding practices was relatively high, however there was also potential barriers in improving the quality of infant and under-five children feeding practices in urban area of Surabaya. Strategies and methods of more effective nutrition education/counseling need to be done, mainly to the caregivers (mothers) and grandmothers as the main target.
Spatial Analysis The Incidence Of Dengeu Haemorrhagic

Fitria
Fajriatin Wahyuningsih, Fitria
Syarif Hidayatullah Jakarta Islamic State University
Indonesia
fitriakarim26@gmail.com

Dengeu Haemorrhagic Fever (DHF) in health center curing area has increased during 2011-2013. There was been 49 cases of DHF in 2011, 42 cases 2012 and 139 cases in 2013.

This study was conducted to determine the spread of DHF incidence through spatial analysis and to describe incidence of DHF with population and larva density, epidemiological investigation and fogging focus.

This study was epidemiological study with ecological. The population study was all of the case DHF in health center pengasinan area from 2011-2013 with the criteria data should have a legal address, and the amount is 216 the cases of DHF. This study used secondary and primary data. The primary data was instrument used a document checklist table, observation sheets and global position system (GPS) Garmin Ex-Trex type 30.

The results showed that the spread pattern of DHF incidence in health center pengasinan at 2011-2013 were clustered pattern, and the value of NNI is decreased 0.86 in 2011, 0.78 in 2012, and 0.64 in 2013. wide spread of DHF has increased in health center pengasinan area from 2011-2013, 509,838 Ha in 2011; 535,316 Ha in 2012; and 570,869 Ha in 2013. From 2011-2013 incidence rate of DHF, epidemiological investigations and fogging focus have increased, but population and larvae density has decreased.

conclusion : curing village has higher incidence of DHF compare to sepanjang jaya village 2011-2013 in health center pengasinan area. The Health intervention programs are expected to do in the area around the incident spread of DHF through adjusting the spreading area of DHF to prevent outbreaks.
Strengthening The Network System In The Measurement Of Healthcare Infection-Control In Lao PDR

Shige Kakinohana  
*Shige Kakinohana; Chikako Maesiro; Yumiko Hennna; Tomoharu Kuda; Phengta Vonphachanh; Kongmany Southalack; et.al; National Center for Laboratory and Epidemiology; the Mahosot hospital; the Setthathirath hospital; the Mittaphab hospital; the University of Health Sciences Japan  
kakinoha@med.u-ryukyu.ac.jp*

Infectious diseases are still one of the extremely high threats for the people in Lao PDR (Laos). We have been working on infection-control measures and educating personnel at hospitals in Laos to improve the medical professionals knowledge and practice for the past decade (from 2001 to 2011). Two key hospitals have started to recognize the importance of infection-control measures in hospitals. However, understanding the situation within Laos and expanding the practice of standard precautions by using the network of local hospitals continues to be problematic. Therefore, in this study, we conducted a workshop on multiple institution participation. This workshop aimed to strengthen the healthcare infection-control network to help understand its present situation and exchange information. It also aimed to unify the healthcare infection-control measures and expand the education of local personnel.

This study aimed to strengthen a multiple institution measurement network system for healthcare infection-control to help share information on infection control methods in Laos. Additionally, we helped medical institutions and hospital staff in Laos to understand the importance of healthcare infection-control measures. Furthermore, we aimed to evaluate the hospital infection control system and common measures practiced in each institution.

We formed a team of researchers composed of the doctors and nurses of the Setthathirat hospital, Mahosot hospital, and Friendship hospital, and nursing teachers from the University of Health Sciences. Subsequently, we considered a concrete way of strengthening the network system. We conducted a workshop in which presenters reported their institutions challenges related to infection-control. Finally, one year after the workshop, we evaluated with the participants if they improved their hospitals infection-control system by using the Japanese infection control system check list for hospitals and if their hospital staff implemented the infection-control manual in the hospital wards.

Presenters of the workshop included health policy makers from the Ministry of Health, persons in charge of infection control of hospitals, teachers from the School of Health Sciences of the University of Health Sciences, chief of the Bacteriology Unit of the National Center for Laboratory and Epidemiology and researchers from the University of the Ryukyus. The presentation topics included challenges related to healthcare infection control in their institutions. There were about one hundred participants. After the workshop, the participants discussed their role in mutual information exchange and challenges which they would face. Additionally, they understood the importance of developing an infection control system in hospitals. One year after the workshop, the hospitals infection-control system was evaluated using the Japanese checklist on infection-control...
systems in hospitals, to communicate the same with community, through the network. Moreover, we checked if the hospitals followed their infection-control manual in practice, supported by the photos the behavior observed. In conclusion, the workshop could strengthen the network system because hospital personnel recognized the importance of close cooperation with each other. We concluded that hospital personnel improved their knowledge and motivation on infection-control through the evaluations conducted one year after the workshop. However, it would be necessary to continue some interventions to improve the knowledge of hospital staff on infection-control and hospital infection control systems.
More students have necessary vision for learning and for occupation in future. In Thailand, vision screening for student not routine for the annual health check up of the school that make parents aware of the cause of visual impairment. Particularly the school is far from the big city they were not opportunity to get visually detecting abnormalities. The purpose of the study were development a student health survey system connecting for users of a screening eye care computer program with Local Area Network via Distance Learning Foundation. This study was a development research in vision screening program for pre-elementary school that was installed at a school site and eye care center at Health Informatics Excellent Center, Department of Biostatistics Faculty of Public Health Mahidol University, Thailand. By using the program, eyesight scanning studies at school and the data were sent via Distance Learning Foundation network and analyzed by an ophthalmologist.

A total of 150 pre- elementary students Wan Klai Kang Won School, Hua Hin District, Thailand participated. All of pre-elementary were the VERA screening test program. Before receiving VERA Basic II, the researcher set up personal computer with installed screening test program both client and server because the model was applied standalone program used on network. Trial out screening test program via network, client computer with installed program VERA Basic II has site at School and sever computer included screening program has site at Excellence Center in Health Informatics, Faculty of Public Health, Mahidol University. This prototype was bridge connection from client to server via Distance Learning Foundation network. The development prototype checked the information and socket before the transmission started. In the study when started connection the host network simulated The LAN and assigned an IP address. Then it started bridged connection network drive to record the visual screening data from remote access and its host. For screening test, the students were vision test in part of Visual Acuity, Farsightedness, Gross Binocularity (Supression), Stereopsis (Binocularity Integration), and Fixation Disparity (Phoria). The analysis method of experiment showed the transfer bits rate of information from client to server.

The results of screening test via network that input in server computer. In client computer, no results of screening test in database file because of the prototype need only system file (.dll) to sharing from client to server. The transfer bit rate of information from remote site was 6801 characters per 0.0049 second. Probabilities of bit error rate (BER) were 0.883. The average time of 1 frame data transmission was 0.0058 seconds and time to send data was 0.28 second. The total rate of transmission from the school site to server was 187,647 bps. The test of screening found that one child have symptom in Amblyopia, one child have low vision cause from accident, and shortsightedness in one schoolgirl. This prototype can apply for the data of student health book. In this health book was collecting data of sealants, child nutrition, weight and height it can make for electronic file.
Study On The Characteristics Of Diabetes Patients Who Have Not Received Medical Care In Early Phase And The Occurrence Of Diabetic Complications

Young-hoon Gong
Young-hoon Gong, Seok-Jun Yoon, Dong-woo Kim
Korea university medical college, department of preventive medicine
South Korea
drzero00@naver.com

Past 40 years after researching prevalence of diabetes in South Korea (hereafter Korea), it has increased 6~7 folds then past. Diabetes itself brings high mortality and disability as well as by its complications. According to data from the Korean statistics, mortality by diabetes was 19.6 per 100,000 in 2010, and to data from Global burden of disease study, worldwide mortality by diabetes accounted for 2.43% of total mortality. Furthermore, many researchers have revealed that economic burden by diabetes and its complications are considerably large.

Diabetes is one of the representative chronic diseases, and it progresses over time. For the management of diabetes, screening for diabetes patients in early phase and comprehensive care including medication to diabetes patients should be needed. In Korea, whereas health examination has widely taken in people, problems on the management of the diabetes have not received attention.

This study aims to reveal how many diabetes patients in early phase have not received medical care and what characteristics they have. And based on this, we compared the diabetic complications in patients who had received medical care in early phase and who had not received.

This study was conducted retrospectively. Korean National Health Insurance claim data was used. Incident cases of diabetes were defined as those who had no claims with codes associated with diabetes from 2001 to 2006, and then had claims with these codes in 2007. The subjects of the study were 69,209 patients diagnosed with diabetes in 2007, who were over 30 years of age in six metropolitan cities in Korea (Busan, Daegu, Incheon, Gwangju, Daejeon, and Ulsan), without microvascular and macrovascular complications from 2001 to 2008.

We compared the general characteristics of the patients who had taken diabetes care in 2008 to the characteristics of those who had not taken. A propensity score matching was used between two patients groups to adjust the differences in medical care by those characteristics. After that, we identified cumulative incidence from 2009 to 2012 of each microvascular and macrovascular complications, according to the medical use. And we compared incidences of complications and the increasing rates of incidences of complications between two patients groups.

Number of subjects in group, which had not received medical care, was much higher than the other group which had medical care in 2008 (69.5% vs 30.5%). In the group of medical care, male was significantly higher than female (56.75% vs 43.25%), whereas that of no care, a number of female was more than male, but difference was not much (48.66% vs 51.34%). The people in the group of no medical care were younger than the other. People who ages between 30 and 49, and ages over 80 had a trend to not received medical care. Important risk factors of diabetic complications,
hypertension and dyslipidemia, were much higher in the group of medical care (61.11% vs 43.86%). And the people in the group of medical care had more significant comorbidities than the other (CCI score 1.0(±1.3) vs 0.7(±1.1)). Proportion of Medicaid patients was much higher in the group of no medical care than that of the other (0.21% vs 1.05%).

After propensity score matching between two groups, cumulative incidences of microvascular and macrovascular complications of diabetes were compared from 2009 to 2012, according to have medical care or not in 2008. All microvascular complications in the group of medical care were much more frequently occurred than those of the other (total microvascular complication cumulative incidence 19.03% vs 4.88%). Macrovascular complications in the group of medical care also occurred more than those of the other group, but difference was more less (total macrovascular complication cumulative incidence 21% vs 17.76%).

And the incidence and increasing rate of the incidence of microvascular and macrovascular complications by year were estimated. On the basis of the incidence in 2009, we had confirmed the growth rate of annual incidence 2010 to 2012. The growth rates of incidences of both complications of diabetes in the group of no care were larger than those of the other group. Difference in increasing rate of incidence of macrovascular complications between two groups was less than those of microvascular complications too.

The results of this study seem to be consistent with recent studies which emphasis on treatment in early phase in diabetes patients. In this respect, this study shows that the ways of management of diabetes in Korea has a significant problem especially in early phase of the disease. There are too many patients who had not received medical care after diagnosis of the disease. They have different characteristics in many aspects compared to the other, but complications of diabetes tended to be developed frequently at last. It seems to be easily being overlooked for relatively young and healthy patients with an early phase of diagnosis, but should not be overlooked for the management of diabetes.
Stunting In Indonesia: Results Of Formative Study For National Nutrition Campaign

Syafiq A
Syafiq A; Fikawati S; Asih Setiarini; Kuspugiono; Iwan Hasan; Dody Izwardi; Minarto
Universitas Indonesia
Indonesia
a-syafiq@ui.ac.id

To address the persistent challenge of childhood stunting in Indonesia, the Millennium Challenge Corporation is collaborating with the Government of Indonesia to carry out the Community Based Health and Nutrition to Reduce Stunting Project. A key component of the project is the design and implementation of a National Nutrition Communications Campaign (NNCC). Formative research implemented in the early stages serves as a foundation for the communications campaign Strategy.

The research objectives are to understand knowledge, attitude, and practices related to stunting.

The research was carried out from September to October 2014. A qualitative survey was conducted in five regions (Sumatra, Java, Kalimantan, Nusa Tenggara and Sulawesi), and covered 10 provinces and 11 districts. A quantitative survey was conducted in 7 provinces and 10 districts, with site selections made to ensure coverage of the varied cultures and religions.

The study indicated that knowledge and understanding of community members about stunting was limited. Stunting was perceived as caused by heredity and genetics, and it was not a problem. The study also found low iron tablet consumption among pregnant women; taboos toward consuming some foods; sub-optimal patterns of exclusive breastfeeding and infant and young child feeding; and child care-related food consumption problems. Community members had strong role as influencer. In terms of hygiene and sanitation, the study found problems on open defecation, water treatment, and hand washing practices. Most respondents indicated good access to television and mobile telephones, but not radio. Respondents were interested in billboards and banners and prefer to receive information through interpersonal communications.

This formative study had successfully identified important behaviors related to stunting to develop a NNCC. Pregnant women nutrition, infant and young child feeding, and sanitation messages will be developed to be communicated through mass media and interpersonal communication channels.
Substance Abuse Among Urban Low Income Residents In Kuala Lumpur, Malaysia

Mas Ayu Said

Mas Ayu Said; Rusdi Abd Rashid; Ahmad Hatim Sulaiman; Mohd Hussain Habil

University of Malaya
Malaysia
mas@ummc.edu.my

Drug abuse and addiction are serious threats and can affect the quality of life and health of the community. The high prevalence of substance abuse and increasing cases among youth and adult population is a public health challenge that needs interventions. Many studies have shown a number of risk factors that make the young population lead to illegal drugs abuse. The risk factors were male, having low self-esteem, and poor social and coping skills, poor modelling from parents and poverty, and availability of drugs in the community.

This study aims to determine the prevalence of substance abuse and the psychiatric morbidity among urban low income residents in Kerinchi, Kuala Lumpur, Malaysia.

A cross-sectional household survey was conducted with a structured questionnaire. A total of 2243 residents aged 18 years and above lived in a low cost housing area in Kerinchi were approached. The type of substance abuse assessed including tobacco product, alcohol, cannabis, cocaine, amphetamine type stimulants, inhalants, sedatives or sleeping pills, hallucinogens and opioids. WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST-BI) and Depression, Anxiety and Stress scale (DASS 21) were used in this study.

A total of 2068 (92.2% response rate) respondents were interviewed. 358 (17.30%) used tobacco product, 34 (1.60%) took alcoholic beverages, 10 (0.43%) used cannabis, 2 (0.09%) used cocaine, 1 (0.04%) used opioids. For psychiatric morbidity screening, 19.6% has depression symptoms, 20.3% has anxiety symptoms and 25.4% reported has stress.

The prevalence of substance abuse among urban low income groups was low except for usage of tobacco product. However, the present of psychiatric morbidity is high and need further clinical psychiatric assessment and diagnosis. Treatment is warranted for those with clinical diagnosis of major depression and generalized anxiety disorder.
Surveillance Of Hemorrhagic Fever Vector In Community Through The Participation Process In Koh Chan District, Cholburi Province, Thailand

Suthep Silapanuntakul
Suthep Silapanuntakul ; Pongsak Yen-On ; Junyaphorn Silapanuntakul
Faculty of Public Health, Mahidol University
Thailand
k.suthep@yahoo.com

The hemorrhagic fever disease has been one of the significant health problem in Cholburi province, Thailand. The occurrence of disease and the outbreak are due to the spreading of Aedes aegypti vector in the community and the availability of its breeding places.

This research was conducted to study the surveillance of hemorrhagic fever vector through the participation process in Koh Chan District, Cholburi province, Thailand.

The participatory action research consisted of data collection among the community volunteers by using the structured questionnaire and project implementation. Totally, 17 significant community volunteers were purposively collected for the study. The prioritization of health problems through the flash card technique was conducted. Data were analyzed and investigated for the community health problems. Implementation of larval survey activities and surveillance of hemorrhagic fever vector project in the community were then carried out.

Results of participating volunteer interview indicated that the hemorrhagic fever was one of the significant health problems in the community (82.4%). All of them knew that the cause of diseases was due to the biting of Aedes aegypti mosquito. The majority of them indicated that measures to prevent from the hemorrhagic fever were the elimination of Aedes breeding places such as old unused tire, discarded water container and bottle, etc., the application of abate sand granules into the water storage container (42.6%). Besides, the frequent cleaning of water storage container both inside and outside the house should be done (20.0%). All agreed that the hemorrhagic fever needed to be solved through the participation of community. The prioritization setting of health problems showed that hemorrhagic fever was one of them and the surveillance of Aedes aegypti mosquito was selected for the implementation. The larval survey by the community volunteers as the existing data for the project was conducted. The HI of the Ban Sattapom, Ban Jednern, Ban Planpai, and Ban Prokfa in Koh Chan District was 21, 31, 28, and 49% whereas the CI of those was 3, 15.8.12, and 15%, respectively. These entomological indexes revealed that the community was at risk of hemorrhagic fever outbreak due to the exceeding of the Ministry of Public Health criteria (HI <10 and CI < 10).

This findings suggest that the participation of community volunteers to sustainably solve the hemorrhagic fever problem in their community is needed. In addition, it suggests that the participation process can help and promote the surveillance of hemorrhagic fever vector in community.
Surveillance System Evaluation Of Diarrhea Control Programme In Purworejo, 2014

Lucky R. Alma
Lucky R. Alma; T.A. Wibowo; Z. Chomariyah
Universitas Gadjah Mada
Indonesia
luckyradita_fetp2013@mail.ugm.ac.id

The service coverage of diarrhea in Purworejo District in 2013 was decreasing (49.71%) compared to 2012 (62.35%) out of 100% of the national target.

This study aimed to evaluate the surveillance system of diarrhea control programme in Purworejo.

This observational descriptive study conducted in 12 May-2 June, 2014 on 16 Public Health Centers (PHC). Data were collected by structured interview and observation using questionnaire to the PHC and Health Office of Purworejo officers.

There were 17 officers interviewed with range of age 26-45 years old. In support aspects, none of officers received diarrhea surveillance system training, only two PHC had diarrhea control programme guideline, and one PHC had no diarrhea reporting form. In function aspects, none of PHC officers did the data analysis and interpretation, 15 PHC reported diarrhea using diarrhea reporting form and only two PHC disseminated the information in across sectors meeting. None of officers gave feedback to report sender. In quality aspects, there were seven PHC with the complete report less than 80%. Surveillance quality could not describe the usefulness and the representativeness.

There was weakness in human and logistics resources, the lack of data management and the low quality of surveillance system of diarrhea control programme in Purworejo. Researchers suggest training of diarrhea control programme surveillance system and data management and analysis, distribution of guideline and technical assistance to improve officers performance.
Taipei City Schoolchildren Health Promotion Project: Vision And Dental Care Program

Fang-Yuan Sheu
Men-Qhuey Lin; Fang-Yuan Sheu; Chun-Yu Hung; Hsin-Yi Chen; Hsiu-Lian Lin; Nicole Huang
Health Promotion Division, Department of Health, Taipei City Government
Taiwan (R.O.C.)
jordan1@health.gov.tw

In 2013, two unprecedented services were introduced by the Taipei City Government, including eye examination services for all second grade children, that the services continue for the next 3 consecutive years of their schoolings, and for first grade children, we offered dental restoration for first molars using pit and fissure sealant, which is followed by dental checkups 6 and 12 months after the procedure.

The objective of this research orientates upon understanding and improving poor eyesight and dental caries in schoolchildren of Taipei City, meanwhile intending to raise awareness on prophylactic measures among parents.

Trainings were delivered by Department of Health of Taipei City Government to our contracted eye and dental clinics on examination SOP and administration. The Health Department has also appointed professional supervising groups to monitor service quality.

As of 2014, a total of 38,893 persons have received our eye examination services, and a total of 45,152 persons have undergone our first molar pit and fissure sealant treatments. Parents have acknowledged the positive outcomes of the services we provided. As supported by our most recent questionnaire, more than 90% of the parents identified our services as being beneficial, which motivates the Health Department to progress further with our project for vision and dental care on schoolchildren.
The Adaptation Of The Implementation Of Just In Time Method A Case Study In Pharmacy Of Kemang Medical Care

A Heri Iswanto

A Heri Iswanto

Kemang Medical Care

Indonesia

hri.isw@gmail.com

The 30%-50% of the hospitals income comes from pharmacy. The mishandling management can result in waste. If the drug excess, the hospital got loss, because the drugs will not be used. Unavailable drugs (stock out) can miss the chance to get a profit. Therefore, some efforts are made to manage the pharmacy, one of them: implementing JIT method. Some hospitals successfully implement these methods, including: Kemang Medical Care (Indonesia), Seattle Children's Hospital, Cincinnati Children's Hospital Medical Center, Sacre-Coeur Hospital in Montreal, and the Hospital for Sick Children (USA).

The aim of this study is designing, implementing, monitoring of the effects JIT towards the pharmaceutical supplies.

The study was conducted only in two hospitals (Kemang Medical Care and Seattle Children's Hospital). The information is gathered from the research reports from those hospitals. Interviews were conducted with those involved in the design, implementation, and monitoring. Questions related to how the JIT is designed, implemented, monitored, and the effects towards the pharmaceutical supplies.

Kemang Medical Care. Cost reduction is calculated from the ratio of purchases to sales. The ratio is increased from 4.39 becomes 8.04; since the purchases are dropped consistently, it is able to compensate the sales.

Seattle Children's Hospital. The program takes 18 months and costs $ 200,000. The implementation of JIT is able to save 23,000 work hours per year and reduce the cost 5% of supply. The costs are equivalent with the ROI for amount $ 2.5 million in the first year and a profit of 1.200%.

The JIT method is more focused on the efforts to reduce the variation in the form of a good visual representation. JIT is a cost control method that eliminates the activity of continuous daily scheduling. Controlling is made easier with a good visual representation. Reduction of variation and visual representation are important in the implementation of JIT.
The Association Between Depression Symptoms And Occupational Chemical Use Among Rice Farmers In Thailand

Suda Hanklang
Suda Hanklang; Orawan Kaewboonchoo; Ikuharu Morioka; Plernpit Suwan-ampai
Mahidol University
Thailand
en101_987654@hotmail.com

Rice farmers are engaged in the important occupation underpinning the Thai economic foundation. They face many occupational risks affecting their physical and mental health, especially risks of hazardous chemicals.

This study aimed to clarify the relationship of depression symptoms and their chemical working factors among rice farmers.

A cross-sectional study was designed. Five-hundred-sixty-eight rice farmers were recruited. Interviews were used to complete the questionnaire on depression symptoms and chemical working factors, such as chemical knowledge. The statistical analysis was performed using descriptive statistics and Chi-squared test.

The results showed that a half of participants were male (51.4%). Average age was 46.5 years old (range between 20-78 years old). Most of them married (84.5%). Almost a half of them were primary school graduates (47.3%). Depression symptoms were found 44.4% (mild to moderate symptom 35.7% and severe symptom 8.6%). Participants using no PPE during working with chemical substances have higher risk for depression than using PPE (Adjusted odds ratio 1.58%, 95% confidence interval = 1.09-2.29). The findings showed the prevalence of depression symptoms among rice farmers was high. Family income, chemical use, PPE use, exposure to chemical substances at mixing, outcome expectation and behavior for chemical intoxication prevention were associated with depression symptoms. Some chemical working factors were associated with depression symptoms.

These results draw attention to the fact that rice farmers exposed to chemical substances have the possibility to have decreased mental health. To decrease the prevalence of depression symptoms, it may be important to help the farmers be aware of chemical intoxication prevention, importance of use the PPE when they use the chemical substances, especially mix them. Social support for financial problems is also necessary.
The Association Between Nutrition Status With Learning Performance In Elementary School Children Of Tobemba, South Sulawesi In 2011

Musdalifah
Musdalifah; Fatmah Afriyanti Gobel
Universitas Indonesia
Indonesia
musdalifah_rizky@yahoo.co.id

Learning performance specially in elementary school age influenced by many problem, such as nutrition status. Under weight condition will affected the body performance more likely feeling weakness, sleeping and poor of focus on the learning process. According to WHO-NCHS standart, Nutrition status classification for children 5-19 years age counted by body lenght divided by age (BL/age) and/or Body Mass Index score divided by age (BMI/age)

This study aimed to analyze the association between nutrition status with learning performance of the student in elementary school of Tobemba.

This study was a cross sectional study. Study population were all of the student in 4, 5, and 6 grade. The total sampling was conducted with 96 children as subject sample. Nutrition status BMI/age was normal if the BMI/age score -2 SD, under weight if the BMI/age score < - 2 SD, BL/age were normal if the score -2 SD and stunting if score <- 2 SD. Learning performance was computed from the average of score in past semester. It category was poor if the score < median score, and good if the score median score. The data was analyzed by chi square analysis.

Results: Under weight was found in 22 children (22.9%) and stunting in 44 children (45.8%). There were 50 children (52.1%) with good in learning performance category and the rest were poor category. Chi Square analyzes in 95% confidence interval showed that no significant association between learning performance score with nutrition status by Body mass index/age (p=0.641) or by Body length/age (p=0.864). Conclusion: This study showed that no association of nutrition status with learning performance in children.
The Best Practice Of Reducing Maternal Mortality In Yogyakarta, Indonesia

Helwiah Umniyati
Helwiah Umniyati
YARSI University
Indonesia
helwiah@gmail.com

Although the rate of pregnancy complications in Yogyakarta province was quite high (13.9%), the maternal mortality was only 1.1%.

to determine factors associated with pregnancy complications
cross-sectional stud, using RISKESDAS 2010 and qualitative research done from April to November 2012. A total of 247 mothers in Yogyakarta were randomly selected.

Multiple logistic regression analysis showed that informing of symptoms of pregnancy complication during first ANC visit was significantly associated with pregnancy complications (OR 2.9, 95% CI 1.2 - 7.0). Information from qualitative research showed that the implementation of ANC in Yogyakarta was very good with coverage of K1 (first visit in trimester 1) in 2011, i.e. 99.98% for the whole Yogyakarta Province and 100% for Yogyakarta city. There was no more mothers going to traditional birth attendance. MMR in 2011 was only 125 per 100,000 live births. This success can not be separated from the government and community support. Regulation of mayor in Yogyakarta city on the utilization of Jampersal funds for pregnant women include not only ANC, but also laboratory test, dental health and counseling. Important role of special cadres for pregnant women (kader ibu hamil) and standby husbands (suami siaga) for always reminding their pregnant wives to do ANC and to take medication regularly were very critical to the success in reducing maternal mortality. High rate of early detection of pregnancy risk by community (157.88%) might have caused the low of MMR in Yogyakarta.
The Capacity Of Silver Nitrate (Agno3) In Reducing E. Coli In Drinking Water

Ariyanto Nugroho
Ariyanto Nugroho; Adi Heru Sutomo; Susi Iravati; Sarto; Yulia Rina Wijaya; Nur Alvira Pascawati.
Universitas Respati Yogyakarta
Indonesia
arie_noegh@yahoo.com

Water is a primary need for human life for justance, for drinking and fulfilling the needs of human body. One of the problems encountered in Indonesia is the availability of safe and consumable water. One of the parameters of water quality is biological hazards, using Escherichia coli (E. coli) or fecal coli microorganism as an indicator.

One of methods developed to overcome the problem is The Use of Ceramic Filter as water treatment in household level. The usage of filter is combined with AgNO3 addition as the bactericide.

This research used an observational analytic design, with pretest-posttest group design approach and quantitative analysis experiment conducted in a laboratory by comparing various dosages and methods of silver nitrate addition to the capacity in order to reduce E. coli in drinking water. It was tested using 12 filters, 4 methods, and 3 dosages of silver nitrate addition.

The result showed the highest decreasing percentage of E. coli up to 99.18% and there was no difference of capacity in reducing E. coli in various dosages and methods of silver addition.
The Challenge Of Health Schools Programs (UKS) Implementation: The Role Of Steering Committee

Muji Sulistyowati
Muji Sulistyowati; Hario Megatsari
Faculty of Public Health, University of Airlangga
Indonesia
mujisulistyowati@gmail.com

Indonesia developed Usaha Kesehatan Sekolah (UKS) as a form of HPS. In 1984 UKS is formalised by a regulation which formed Steering Committee in all level of government. In 1991, the government also issued a regulation that signed by 4 ministries (Health Ministry, Religious Minstry, Education Ministry and Ministry of Home Affairs), it is called Surat Keputusan Bersama (SKB). The purpose of SKB is to manage and maintain UKS in all level of school (kindergarten until senior high school), and the SKB is renewed in 2003 (no 1/U/SKB/2003). Ministry of education (2007) stated that in general UKS hasnt reached the noble purpose. It is supported by researched that conducted by many institutions and researchers, such as Permatasari (2010), Ministry of Home affairs and others. Limbu (2010) stated that the UKS in the elementary school in City of Malang is lack of infrastructures so that they cant perform very well in the implementation of UKS.

As mentioned above, there are a lot of barriers to implement UKS. One of the barrier is human resources barrier which is the steerring committee. The purpose of this research is to explore the role of steering committee in terms of increasing the implementation of TRIAS UKS in the elementary school in City of Surabaya.

This is a descriptive qualitative research and the design is a cross sectional. Qualitative approaches is conducted to obtain the deeper information from the informants. The location of the research is in the City of Surabaya and it was done from July-November 2014. The sample of the research is five elementary schools which represent 5 areas in Surabaya (Centre, North, South, West and East), and the method of sampling is random sampling. To get the information, the informants of the research comprise of organizing committee (5 principals) and steerring committee (5 head of health centers, 5 person represents sub district, and 5 person represent ministry of education in the sub district level).

The variables of the research are knowledge, attitude, role and activeness of the steerring committe and the relation with achieving TRIAS UKS in the school as a analysis unit. Content analysis are used to analyse the findings.

The informants of sterring committee comprise of health center units, sub district, and representation of ministry of education in the sub district level (UPTD BPS = Unit Pelaksana Teknis Dinas Bina Pengawas Sekolah). UPTD BPS in the city of Surabaya is divided into 5 areas, each UPTD BPS responsible in some sub districts.

The result show that, in general, the steerring committe have a good knowledge about UKS. Even though they dont specifically mention about the definition UKS, but they mention that UKS is related with health student.
All of the informants agreed that UKS is very important in the school, as a matter of fact some informant stated that UKS is a mandatory program. UKS can guarantee the health status of students and also to make easier implementing others health program in the school. UKS also can develop educational character in the students about healthy living and clean.

To measure the role and activeness of steering committee, this research observe the coordination and meeting which are held in term of guiding and activating UKS in every school that become their responsibility. There are some various opinions related to the role and activeness of steering committee from each components of steering committee.

Most of the sub districts component stated that they lack of coordination about UKS due to the other program business. Routine coordination across sector was conducted, but UKS wasnt talked too much. Some findings showed that the regulation in the sub district level about steering committee of UKS havent renewed yet. Most of them have the legal standing in the sub district level, but it was old version.

Leading sector is sector that have significant role in the UKS. There are different perception about leading sector in the sub district level. Some of informants consider the head of sub district is the leading sector, because he own the territory. But others argued that the leading sector is health center, because the content of UKS is mostly about health. And others also stated that the leading sector is the headmaster, because the UKS is in the school.

The success of maintaining and implementing UKS in every level of education can be seen by the implementation of TRIAS UKS as a core program of UKS which consist of health education activities, health services activities and maintaining health of school environment. Based on the criteria of TRIAS UKS, there are various opinion about it. Most of them agreed that the availability of UKS room is a general requirement to implement UKS. And also the availability of complete medicine is a qualification to implement UKS.

The results showed the need of socialization and effort to refresh the information about UKS in all components of steering committee in the sub district level. Coordination and meeting from all components of steering committee need to be rescheduled, not only when facing the competition, but the coordination should be done routinely based on the local meeting, for example the meeting of accross section in sub district level. The role of coordinator is in the sub district office by Head of sub-district (ministry of education, 2012). The component of sub district level also have responsibility to allocate financial for maintaining and implementing UKS in their territorial authority.
The Comparison Of Typhoid Fever Risk Based On Personal Hygiene And Snacking Habit For Children 7-12 Years Old At Elementary School, Situbondo

Fariani Syahrul
Fariani Syahrul;
Hilda Nuruzzaman
Faculty of Public Health, Airlangga University
Indonesia
fariani_syahrul@yahoo.com

Quality of human resources is determine by two factors, namely education factor and health factor. Personal health, including health on school-age children comes from food intake. But often, these foods can cause health problems, such as typhoid fever. Typhoid fever are disease that spreading through food and drinks that infected by Salmonella typhi. Typhoid fever usually found in children because at their age (7-12 years old) there are bigger opportunity to eat outside (example. food street) and thus the possibility to get infected become higher.

to analyze comparison of typhoid fevers risk based on personal hygiene and snacking habit for children 7-12 years old in Elementary School, Situbondo.

This research was observational study with case control design. Sample cases group consist of 40 children which diagnosed with typhoid fever and sample control consist of 40 children without typhoid fever. Sample cases and control choosen with simple random sampling based on medical records at dr.Abdoer Rahem Hospital Situbondo, East Java. Analyze risk factors with Odds Ratio (OR) and 95% Confidence Interval.

Result of this research, children who has bad habit of washing hand after defecate 4.42 times (1.49 <OR< 13.72 ) higher risk of typhoid fever than children who has good habit of washing hand after defecate. Children who has bad habit of washing hand before eating was 4.06 times (1.42 <OR< 11.83) higher risk of typhoid fever than children who has good habit of washing hand before eating. Children with high frequency of eating snack in school was 3.89 times (1.39 <OR< 11.06) higher risk of typhoid fever compared to children that rarely eating snack in school. Children who has bought some food in food street was 4.89 times (1.72 <OR< 14.18) higher risk of typhoid fever than children who has bought some food in schools canteen. Children who has bought some food without packing in school was 3.57 times (1.27 <OR< 10.18) higher risk of typhoid fever than children who has bought some food with packing.

So, it can be concluded that children ( 7-12 years old) with good habit of washing hand after defecate and before eating, rarely snacking, snacking in schools canteen and buy some food with packing could be decrease their risk of typhoid fever in Elementary School.

Suggestion that can be taken from this research are children must be maintain their personal hygiene and snacking habit in Elementary School to prevent typhoid fever.
The Compliance To Tuberculosis Treatment Among Ethnics And Areas In Merauke, Papua, Indonesia

Muhammad Atoillah Isfandiari
Muhammad Atoillah Isfandiari; Suratdi
Faculty of Public Health Universitas Airlangga Surabaya
Indonesia
m.atoillah@gmail.com

In spite of continuing TB treatment program during 2009 - 2011 in Merauke, Papua, success rate of TB treatment paradoxically decreased from 100 % to 97.5 %. In the same period, cure rate in the inland area never exceeds 13 %, worse than the low cure rate in urban area (54.58 %). These conditions were considered to be affected by patients compliance to tuberculosis treatment

The goal of this study was to measure the compliance to tuberculosis treatment among ethnics and areas in Merauke and factors affected it.

In this cross sectional study, we observed 128 tuberculosis patients from 7 health centers in both urban and inland area in Merauke, during May until June 2013 using cluster random sampling method. Data was analyzed using Chi-square test.

The results showed that the compliance of non-native ethnics to tuberculosis treatment was higher (96.9%) than native ethnics (80.2 %), and so was the compliance among urban people (87.6% of all patients in urban area) compared to those in inland (30% of all patient in inland). Thus, the compliance to tuberculosis treatment was associated with the ethnicity (p value 0.049; Ï‡: 0.05) and the difference between urban and inland areas (p value 0.001; Ï‡: 0.05) with the disparity of the level of knowledge about tuberculosis treatment between urban and inland area residents (p value 0.001; Ï‡: 0.05), because 99% of urban area patients had good level of knowledge about tuberculosis treatment, compared to only 50% of inland area patients.

The conclusion is that the compliance to tuberculosis treatment in Merauke Papua was associated with the ethnicity and the difference between urban and inland area due to the disparity of the level of knowledge about tuberculosis treatment. More understandable education about patient-centered tuberculosis treatment might be a consideration to be implemented to avoid tuberculosis treatment failure.
The Differences Between Food Consumption And Respondents Characteristics In Children 6-12 Years Old With Overweight Based On The Living Area In Indonesia (Data Analysis Of Riskesdas 2010)

Erena Fabyola Laurensia
Erena Fabyola Laurensia; Ratna Djuwita Hatma
Pusat Riset Epidemiologi dan Surveillans FKM UI Indonesia
erena.fabyola@gmail.com

Phenomenon of transition from communicable to non-communicable diseases and the high mortality rate because of non-communicable diseases become a serious problem. One of the factor is because of the increasing number of overweight. In Indonesia, overweight in children age 6-12 years has the highest prevalence (9.2%).

know the difference between food consumption in children age 6-12 years with obesity based on the living area

This study is using Riskesdas 2010 data, with cross-sectional as the study design. The sample in the study is children age 6-12 years who are the samples in Riskesdas 2010 with the no-missing data of body-weight and height of the children in the study.

There are differences between total energy consumption in the urban area, protein consumption in urban and rural area. This study suggests to educate the children and parents about the balancing and healthy food consumption, prioritizing program in urban area, also cooperate with Education Ministry and schools.
The Distribution Of Human T-Lymphotropic Virus Type I (HTLV-1) Tax Genotype In Okinawa Is Different From Mainland, Japan

Shugo Sakihama

Shugo Sakihama; Megumi Kuba-Miyara; Mineki Saito; Takeaki Tomoyose; Naoya Taira; Takashi Miyagi; Masaki Hayashi; Sawako Nakachi; Yukiko Nishi; Keita Tamaki; Kazuho Morichika; Junnosuke Uchihara; Yuetsu Tanaka; Hiroaki Masuzaki; Takuya Fukushima
1. Laboratory of Hemaitoimmunology, School of Health Sciences, Faculty of Medicine, University of the Ryukyus, 2. Department of Microbiology, Kawasaki Medical School, 3. Division of Endocrinology, Diabetes and Metabolism, Hematology, Rheumatology, Second D Japan
e094521@gmail.com

Human T-lymphotropic virus type I (HTLV-1), a retrovirus that is prevalent in endemic areas such as southwest Japan, is the etiological agent of adult T-cell leukemia/lymphoma (ATL) and HTLV-1-associated myelopathy/tropical spastic paraparesis (HAM/TSP). The tax gene of HTLV-1 has been classified into two groups: taxA and taxB. TaxA is the most prevalent genotype in Brazil, and taxB is the dominant genotype in mainland Japan, including Kagoshima prefecture in southwest Japan. Interestingly, in Okinawa prefecture located at the southernmost end of Japan, preliminary investigation of the tax gene in HAM/TSP patients suggested that taxA could be more frequent in this location than in Kagoshima prefecture (unpublished data). In this study, we examined tax genotype of specimens in HTLV-1 carriers (HCs) or ATL patients living in Okinawa prefecture. In addition, the association between tax variation and the clinical outcome of aggressive ATL (acute and lymphoma types) patients was studied.

The purpose of this study was to clarify the dominant tax genotype of HTLV-1 in Okinawa prefecture and analyze the association between tax genotype and clinical outcome in patients with aggressive ATL.

A total of 25 HCs and 58 patients (acute, n=35; lymphoma, n=10; chronic, n=5; and smoldering, n=8) with ATL from 4 institutions (University of the Ryukyus Hospital, Heart-life Hospital, Nakagami Hospital and Naha City Hospital) in Okinawa prefecture were recruited for this study from January 2013 to June 2015. The study protocol was approved by the institutional review board of each institution. All patients provided written informed consent before initiation of study-related procedures.

We collected peripheral blood mononuclear cells from all HCs and 51 ATL patients, and harvested lymph nodes from 7 ATL patients. To identify the tax genotype in these cases, we analyzed DNA by PCR-RFLP method using gene-specific primers PXO1 (5'-TCGAAACAGCCCTGCAAGATA-3') and PXO2 (5'-TGAGCTTATGATTGTCCTCA-3'). Then, a second PCR was done with nested primers PX3 (5'-AGACGTCAGCCTTAGTCT-3') and PX4 (5'-CACGCTAACAGCCTGGGCAA-3'). Nested PCR products were digested with AccII restriction enzyme and subsequently segregated by electrophoresis. TaxA and taxB can be recognized as a 400-bp fragment and a 450-bp fragment, respectively.
We collected initial clinical data, including age, performance status, white blood cell count, ATL cell subset, serum albumin, corrected calcium, serum interleukin-2 receptor and lactate dehydrogenase, from 45 patients with aggressive ATL, and followed their clinical courses. The choice of chemotherapy regimen was made by each attending physician based on the general conditions of the patient.

The log-rank test was used to assess the discrepancy between tax genotypes and the Kaplan Meier method was applied to estimate overall survival (OS). Of all 83 HCs and patients with ATL, 33 (40%) had taxA and 50 (60%) had taxB. Twelve (48%) of 25 HCs, and 21 (36%) of 58 patients with ATL had taxA genotype.

We followed the clinical course of patients with aggressive ATL (acute, n=35; lymphoma, n=10) and compared the clinical outcome between the two tax genotypes. The median and longest follow-up periods were 6 months and 22 months, respectively. Fourteen (acute, 10; lymphoma, 4) and 31 (acute, 25; lymphoma, 6) patients had taxA and taxB, respectively. According to the Japan Clinical Oncology Group (JCOG)-Prognostic Index (PI), the number of patients at moderate and high risk were 7 each in patients with taxA genotype and 7 and 24 patients with the taxB genotype, respectively. Seven (50%) of 14 patients with taxA genotype achieved a complete response (CR) or partial response (PR), whereas 22 (71%) of 31 patients with taxB genotype achieved CR or PR. Seven patients with taxA genotype and 13 patients with taxB genotype had died at the last follow-up. The 1-year overall survival (OS) rate were 35% in patients with taxA genotype and 49% in those with taxB (P=0.35).

This is the first report about the distribution of tax genotype in Okinawa prefecture. We revealed that the prevalence of taxA genotype was approximately 40% among HCs and patients with ATL in Okinawa prefecture, which is different from the prevalence of >90% of taxB genotype in mainland Japan as previously reported. The reason for this discrepancy between Okinawa prefecture and mainland Japan remains unknown. It has been reported that genetic differentiation was observed between inhabitants of Okinawa Island and mainland Japan in a genome-wide SNP analysis. The difference of tax gene distribution might be related to the demographic history in Japan.

We found that taxA genotype showed worse OS than taxB genotype in our analysis (1-year OS of 35% and 49%, respectively), although this result did not reach statistical significance. Also, the CR and PR rates in taxA genotype patients were lower than those in taxB genotype patients. Despite the small number of cases and short follow-up periods which were limitations of our study, our results suggested that HTLV-1 tax genotype might be a prognostic factor for patients with aggressive ATL. Recently, a retrospective large-scale study of aggressive ATL in Okinawa prefecture demonstrated that the median survival time of 6.5 months was worse than those in previous reports (8-10 months). A further study to evaluate the prognostic value of tax genotype in aggressive ATL is needed in Okinawa prefecture.
The Double Burden Of Malnutrition In Mother And Child: Baseline Survey In Surabaya, East Java Indonesia

Lailatul Muniroh
Lailatul Muniroh; Triska Susila Nindya; Farapti
Universitas Airlangga
Indonesia
lailagizi@gmail.com

Nutritional problems in Indonesia are becoming increasingly. Beside undernutrition problems, the current tendency of overnutrition or obesity in the communities become a new problem in nutrition field. It is called a double burden malnutrition problem. Double burden malnutrition problem not only in rural areas, but also in urban areas. The prevalence of stunted and wasted children are still high, while the overnutrition problems or obesity in children and adults began to increase. Undernutrition is a multi-complex problem with the underlying factor is a poverty, while other causes are economic factor, food access, socio-cultural, lack of knowledge about nutrition, and also infectious diseases. Meanwhile overnutrition and obesity is the result of positive energy balance. Beside that, also due to lack of physical activity. Unhealthy lifestyle also be the cause of obesity.

The purpose of this study was to analyze the double burden malnutrition problems that occur in the mother and child in Surabaya. In addition, to know the prevalence of undernutrition and over nutrition problem in mothers and children in Surabaya.

This research was a survey with a cross-sectional design, conducted in 5 villages located in the Public Health Center area selected in 5 Surabaya area that has the most double burden malnutrition problems. Sampling in a two stage random sampling. The first stage select community group from each village, the second stage choose neighbourhood group from each community group selected. The samples were taken throughout the children and his mother from neighbourhood group selected. Respondents in this study were mothers of neighbourhood group randomly selected. The inclusion criteria were not congenital defects, and a single birth. The primary data obtained through interviews, measuring weight, height, arm circumference, waist and hips. Descriptive data analysis with frequency distribution table and cross tabulation. Analysis of the relationship between variables using Spearman correlation test.

The results showed that the majority of the nutritional status of children with W/A, H/A, and W/H index were categorized normal. The prevalence of underweight children was 20.3%. This data was higher than national data 2013 of 19.6% and East Java data of 12.1%. The prevalence of stunted children in Surabaya was 29.3%. This data was lower than the national average of 37.2%. The prevalence of wasted children in Surabaya was 14.1%. This data was higher than the national prevalence (12.1%) and East Java prevalence (8.2%). While the prevalence of overweight children in Surabaya was 7.1%. This data was lower than the national prevalence (11.9%) and East Java prevalence (10.3%). Maternal nutritional status with BMI index showed that most had normal nutritional status, but the percentage of overweight was almost the same as the normal nutritional status. Obesity was also relatively high (24.6%). Based on the MUAC parameters, majority of mothers had normal nutritional status (93.6%), because MUAC was a parameter for screening of
acute malnutrition. Based on the WHR index showed that the majority of mothers had very high WHR of 63.7%. High WHR was a risk factor for degenerative diseases. The analysis showed there was a relationship between BMI mothers with nutritional status of children based on W/H index (p=0.001). There was a tendency if the mother obese then the child also suffered obese. Likewise, if the mother wasted there was also a tendency to wasted children. There was a relationship between WHR mothers with nutritional status of children based on H/A index (p=0.000). There was a tendency if WHR mother was high, nutritional status of children categorized stunted. There was no relationship between BMI and MUAC mothers with nutritional status of children based on H/A index. There was no relationship between BMI, MUAC, and WHR mother with nutritional status of children based on W/A index. There was no relationship between MUAC and WHR mothers with nutritional status of children based on W/H index.
The Effect Of Allium Cepa L On Blood Glucose Level Regulation In Diabetes Mellitus Mice

Ariska Putri Hidayathillah
Ariska Putri Hidayathillah
Universitas Airlangga
Indonesia
ariska217@gmail.com

Diabetes mellitus is a degenerative disease with high prevalence that happens in many countries and high risk of causing death.

The objective of this study is to know the effect of decoction by Allium Cepa L On Blood Glucose Level Regulation In mice with diabetes mellitus.

This research was using true experiment design and the method was prr post test with 30 samples, 8-12 weeks old - male mice and 20-30 grams in weight. The mice were devided into five groups. The clarification were done randomly. The independent variable was Allium Cepa L decoction (1cc) as a treatment wich is given per oral. Furthermore, the dependent variable was blood glucose levels after 7 days treatment with Allium Cepa L decoction.

The results showed that there were some differents between the treatment group and the diabetes control group without treatment for blood glucose Level after giving treatment with Allium Cepa L. Decoction (p< 0.05). In other hand, there was no significant results between the normal group and the treatment group for blood glucose level after giving treatment with Allium Cepa L decoction 5gram/kgbb (p>0.05). Allium Cepa L contains many substance, there are allicin, aliin, quercetin and calcium which has many function to regulate blood glucose level. It can be concluded that Allium Cepa L decoction (5 gram/kgbb in 1cc) is adequate for regulating blood glucose level in Diabetes mellitus mice after 7 days treatment.
The Effect Of Pencerahan Qalbu Padang Lampe On Stress Perception, Coping Strategies And CD4 Counts In People Living With HIV/AIDS

Fatmah Afrianty Gobel

Fatmah Afrianty Gobel, Nasronudin, Suhartono Taat Putra

Universitas Muslim Indonesia Makassar

Indonesia

yantigobel@gmail.com

People living with HIV/AIDS (PLWHA) have psychological distress. Spiritual Enlightenment Padang Lampe (Pencerahan Qalbu Padang Lampe, PQPL) is one of spiritual approaches that is only performed by Indonesian Muslim University for new students. Therefore, PQPL has not been studied and performed in other places and has never been subjected to PLWHA.

This study aimed to prove the influence of PQPL on changes in spiritual dimension, coping strategies, stress perception and CD4 counts of HIV/AIDS.

This study was a quasi-experimental study using non-randomized pretest and posttest control group design. A total of 23 treatments were given with PQPL in 3 phases during April-September 2014 and 20 controls were given standard therapy and spiritual motivation brochures. Before and after PQPL, CD4 count was checked and the respondents filled out questionnaires. Data analysis used paired t test, McNemar test, independent t test, PLS and the General Linear Model (GLM).

Distribution of PLWHA was homogeneous, either in treatment or control groups. Most respondents aged 30-34 years old, predominantly male, mostly high school educated, generally married, and had been diagnosed for 1-3 years old. From 19 PLWHA with distress during pre-test, 12 (63.2%) became eustress during post-test, with significant difference \(p = 0.013\). Spiritual dimensions of the treatment group increased from 36.74 to 58.74. Treatment group had increased coping strategies from 124.35 to 143.48, which was significantly different \(0.001\). Final Modeling of variable correlations showed that PQPL had effect on spiritual dimension \(T = 2.433\), spiritual dimension had effect on positive coping \(T = 11.065\), and positive coping had effect on stress perception \(T = 3.811\). In conclusion, Pencerahan Qalbu Padang Lampe improved spiritual dimension, positive coping strategy, and the alteration of stress perception from distress into eustress. PQPL, as cognitive stimulation, should be undertaken to control HIV/AIDS. Further studies are needed on the prediction of duration and length of effective treatment to enhance CD4 as biological indicator in PLWHA.
The Effect Of Tuberculosis Anatomical Site To The Survival Of TB-HIV Co-Infection Patient For 2 Years After Diagnosed In The Center Of Infection
Prof. Dr. Sulianti Saroso Jakarta (2010-2013)

Helda Nor Efendi, Helda
FKMUI
Indonesia
helda_dr@yahoo.com

HIV infection results in a progressive decrease in the body’s immunity, so that the latent infection tend to develop into active TB and the spread of TB germs that become more active is not able to be prevented by the immune system. Extrapulmonary and disseminated TB becoming more prevalent and makes the prognosis worse.

The objective of this study was to determine the effect of anatomical site of TB to the survival of TB-HIV co-infection patient in 2 years after diagnosed

The design of this study was dynamic retrospective cohort with 177 medical records of TB-HIV co-infection patients in the Center of Infection Hospital Prof. Dr. Sulianti Saroso, Jakarta, from 2010 to 2013, taken by simple random sampling technique.

The survival of TB-HIV co-infection for 2 years after it was diagnosed in patients with anatomical site of TB in the extrapulmonary was 86% and it was lower compared to patient with the anatomical site in the pulmonary which was 98%. Anatomical site of TB in the extrapulmonary were found to be an influencing factor to the rate of death in TB-HIV co-infection patients (adjusted HR 1.48, 95% CI : 0.55-4.02, p : 0.437) after controlling with contagion factors and the level of CD4.

HIV infection cause the widespreading damage in the immunity system therefor the infection and the spread of TB microbe also widespread to other organ such as lymph nodes and pleura. Extrapulmonary TB had higher burden of TB microbe and showed the progressivity of the disease become worse that caused the probability of the patient’s survival decrease.

Anatomical site of TB effect on survival (survival probability) 2 years patients co-infected with TB-HIV after diagnosis. Patients co-infected with TB-HIV anatomic site in extra-pulmonary TB have a risk of 1.48 times more likely to die compared to the anatomical site of TB in the lungs after considering the risk factors for transmission and initial CD4 levels.

Intensive screening are needed for TB/HIV co-infection patients to diagnosed the possibility of TB infection in the extrapulmonary as early as possible to increase the quality of life of its patients by finding the proper treatment.
The Fatty Acid Pattern In Japanese Vegetarians With Different Genotypes Of FADS1

Chiharu Nishijima
Chiharu Nishijima; Terue Kawabata; Yasuo Kagawa
Kagawa Nutrition University
Japan
nca121@eiyo.ac.jp

The intake of fish has decreased down to 70g/day/person in Japan in 2013, and this will cause health problems in persons with polymorphism of delta 5 fatty acid desaturase (FADS1) rs174547 C-allele (homozygotes 14% and heterozygotes 46%). The C-allele carriers show low activity of synthesizing DHA (docosahexaenoic acid) from ALA (alpha-linolenic acid) via EPA (eicosapentaenoic acid), and AA (arachidonic acid) from LA (linoleic acid).

The purpose of the present genetic study was to assess the fatty acid pattern and health index in C-carrier vegetarians according to their dietary pattern.

The total subjects were 166 self-defined vegetarians (male 19.8%, 43.1±13.4 years), of which 63 were classified as vegans + lacto vegetarians: all animal products were excluded from their diet but dairy (VL), 49 were fish-eating vegetarians: marine products are included but not animal meat from land (Fish eaters), and 54 were meat/egg-eating vegetarians: animal meat and/or eggs from both land and marine origin are occasionally included (Meat/Egg eaters), by a digital-photograph assisted 3-day dietary record. The genetic polymorphism was determined by using TaqMan Genotyping Assay Systems. Fatty acids of plasma phospholipids were analyzed by gas chromatography.

The genotype frequencies of rs174547 were TT 32.3%, TC 54.0% and CC 13.7%. The intake of fishery products was 0g in V while 6.8g/1000kcal in F. The C-allele carriers of V had lower plasma DHA (TT=1.00, TC=0.80, CC=0.63), EPA (TT=1.00, TC=0.88, CC=0.48) and AA (TT=1.00, TC=0.77, CC=0.55). In all dietary patterns, the C-allele carriers tended to have higher precursors (ALA and LA) and lower products (DHA and AA). Cardiovascular health check revealed that more than 90% of all subjects showed BMI<25, blood pressure <130/80 mmHg, LDL-cholesterol<140 mg/dl and total cholesterol<220 mg/dl.

Although the prevalence of cardiovascular risk factors are much lower among all vegetarian groups compared with average Japanese (National Nutrition Survey 2013), the C allele carriers in V had less plasma DHA and EPA than F. The lowest death rate in pescovegetarian among vegetarians has been reported.
The Frequency Of Hypoxia-Inducible Factor-1 Protein Expression On Laryngeal Squamous Cell Carcinoma And Its Correlation With Various Clinicopathology Factors At Dr. Sardjito Hospital, Jogjakarta, Indonesia

Lisa Novianti
Lisa Novianti; Agus Surono
Faculty of Medicine, Universitas Gadjah Mada
Indonesia
lisa.novi@mail.ugm.ac.id

One of the cancer that has high incidence and mortality in South East Asia and South Europe are Head and neck cancer. The second most happened, after skin cancer, of head and neck cancer is laryngeal cancer. More than 95% laryngeal malignant type is squamous cell carcinoma. Hypoxia region is a consequence of solid tumor fast expansion. Hypoxia occurs when the tissue does not get enough local vascularization for nutrition and oxygenation. Hypoxia will trigger tumor tissue also to express hypoxia-inducible factor-1 (HIF-1α). This protein is transcription activator that play important role in angiogenesis, cell proliferation, glucose/ iron metabolism, and migration.

This research was conducted to determine the frequency of expression of hypoxia-inducible factor-1 protein in laryngeal squamous cell carcinoma and its correlation with various clinicopathology factors (sex, age, tumor location, and histopatological grade).

This was a type of descriptive analytics cross sectional study. Protein expression examination was conducted by using immunohistochemical staining on tissue biopsy results (paraffin blocks). This examination was conducted on sample of tissue biopsy which were registered from 2012-2013. Consecutive sampling were applied in this study. Fisher exact test was used to analysed the correlation between frequency of expression of hypoxia-inducible factor-1 protein and sex, age, and tumor location. Furthermore, chi square test was used to analysed the correlation between frequency of expression of hypoxia-inducible factor-1 protein and histopatological grade.

The frequency of positive HIF-1 protein expression was 60% and negative was 40%. There were no significant correlation between frequency of expression of positive HIF-1 protein with sex (p=0.150), age (p=1.000), tumor location (p=0.150), and histopatological grade (p=0.079). The conclusion of this study is frequency of positive hypoxia-inducible factor-1 protein expression in this research was 60% from the 25 sample. There were no significant correlation (p>0.05) between frequency of positive HIF-1 protein expression with various clinicopathology factors.
The Impact Of Educational Intervention On Sexual Reproductive Health Knowledge And Attitude Among Primary Health Care Providers: A Case Study From Malaysia

Fadzilah Hanum Mohd Mydin
Fadzilah Hanum Mohd Mydin; Sajaratulnisah Othman; Wong Yut Lin; Vickneswari Ayadurai; Nur Amalina Mustaffa; Betty Yeoh Siew Peng; Julia Suaimi; KA Malek; Suraya Abdul Razak; Sharina Mohd Razali; Low Wah Yun
University Malaya
Malaysia
fadzilah.hanum@ummc.edu.my

The sexual and reproductive health (SRH) of Malaysian adolescents and their need for youth friendly reproductive health services has been the focus of significant policy and intervention activity. Adolescents in Malaysia face a range of SRH problems. Primary health care service providers are the core health care providers of adolescent SRH services, but public health facilities are under-utilized by adolescents. Stigmatization, inadequate confidentiality and negative attitude from health care providers are the barriers for adolescent to utilize the health care services for SRH.

This study aimed at evaluating the change of primary care providers knowledge and attitudes with a short educational intervention on adolescent SRH problems.

An educational intervention was developed based on expert input and literature review. The intervention involving a half-day workshop, consisting of brief presentations and simulation of adolescent SRH scenarios for service providers in a public primary clinic in Klang Valley, Malaysia. A rapid assessment of knowledge and attitudes towards adolescent SRH pre and post training was conducted among 47 primary health care service providers at this clinic. A self-administered questionnaire was used for evaluation, pre and post training. Descriptive analysis was conducted from the data collected pre and post training.

Pre-training, participants are able to define the adolescent age (80.9%), teenagers sexual maturity for girls (91.5%) and boys (12.8%). 61.7% are aware of teenagers sexual thought maturity, but more than half (55.3%) of them do not know about teenage brain development. More than half (53.2%) of the participants are not aware that abortion is allowed in Malaysia and 80% of them are not aware of the age criteria for statutory rape. Only 28% of them are aware that intimate partner violence is one cause of teenagers mortality.

Participants attitude towards teenagers SRH needs are generally negative before the training. They strongly disagree with pre-marital sex (93.6%), abortion among unmarried teenagers in any circumstances (53.1%) and they would manage unmarried pregnant teenagers without taking into consideration the teenagers needs (46.8%). 38.3% of the participants disagree that pregnancy outside marriage is the just retribution for teenagers immoral behaviour and 6.4% of them still blame girls solely for unmarried teenage pregnancy. They disagree that teenagers from poor socioeconomic background have a higher risk of pre-marital pregnancy (59.6%). They agree that
aggressive behaviours are not acceptable in intimate relationship (78.7%). 19.2% of participants agree that handling troubled teens is a burden.

The post-training evaluation showed an improvement of participants knowledge. These include participants knowledge of the adolescent age group (98%), pubertal changes in boys (28%), teenagers brain development (68.1%) and the maturity of teenagers sexual thought (74.5%). Knowledge on statutory rape (64%) and abortion laws (74.5%) showed most improvement. Participants ability to identify intimate partner violence as one of the causes of mortality among teenagers has also increased (51%).

Generally participants attitude to adolescent SRH was quite negative, but overall improved after the training program. They still have negative attitudes towards pre-marital sex (95.7%). Participants attitudes towards providing services to unmarried pregnant teens not solely based on the guidelines but also taking into account the adolescents needs improved (23.4%). Participants show agreement towards these statements; no longer solely blame the girls in unmarried teenage pregnancy, pregnancy outside marriage is not the just retribution for immoral behavior by the teenagers (53.2%) and abortion among unmarried teenagers can be done under certain circumstances (57%). They still disagree teenagers with poor socioeconomic backgrounds have a higher risk of being involved in unmarried teenage pregnancy (60%). The majority of them (81.3%) agrees that aggressive behaviours are unacceptable in intimate relationships. Post training only 10.7% of the participants agree that handling troubled teenagers is a burden for them.

A short educational intervention on adolescent SRH generally improves immediate knowledge and attitude of primary care providers. Future research should address potential long-term effects of this brief educational intervention. A minority continued to display negative attitudes. Such negative attitudes will impose barriers to service utilization by adolescents and impedes the efforts to provide adolescent friendly health care services.
The Impact Of JKN Implementation On Hospital Financial Performance

Rina Wahyu Wijayani
Rina Wahyu Wijayani; Galih Permana; Nisa Kamila
Universitas Indonesia
Indonesia
wijaya_ni@yahoo.com

In pursuing of human right on health matters, Indonesia starting to conduct National Health Insurance (JKN) Program since 2014. JKN is part of National Security System (SJSN) that aimed to achieve an Universal Health Coverage for all citizen with the equity principle. This JKN held by a single insurance company called BPJS. UHC means that there is a changing of health financing from multipayer to single payer. This changes may give several impact either to health status or to hospital performance as health service provider. BPJS paid hospital with packet system with INA CBGs fare that commonly different from the hospital common fare. This changes give a challenge to hospital management to maintain their finance on a good liquidity and profitability level so their not going to be bankrupt.

This study show financial ratio analysis to describe liquidity and profitability level in the 2013 when not established yet and in the year 2014 that was the first year JKN implemented. This study aimed to see the impact of JKN established on liquidity and profitability State Hospital under Ministry of Health.

Crossectional Study that uses secondary data which is Financial Statement of State Hospital under Ministry of Health. The study use financial statement of 31 State Hospital under Ministry of Health and the hypothesis tested with Paired Samples T-Test.

1. From 31 hospital only 4 hospital has negative trend on their profit, means that on the first year of established JKN there is a positive profitabilities effect on 31 State Hospital under Ministry of Health.

2. There is significant different on Profit, Gross Profit Margin (GPM), Return On Asset (ROA) and Collection Period

3. There is no significant different on liquidity performance (Current Ratio and Quick Ratio)

The result of this study shows that from 31 hospital only 4 hospital has negative trend on their profit. From Paired Samples T-Test, there is significant different on Profit, Gross Profit Margin (GPM), Return On Asset (ROA) and Collection Period. There is a positive trend of profitability performance in almost samples. This test also shows there is no significant different on liquidity performance (Current Ratio and Quick Ratio)
The Impact Of POSBINDU PTM As Community-Based Preventive Program On Reducing Prevalence Of Non-Communicable Diseases In Indonesia

Novia Gita Suriantino
Defi Amalia Setia Ningrum; Novia Gita Suriantino; Pradita Rani Nurharianti
Airlangga University
Indonesia
praditaranin@yahoo.co.id

Based on RISKESDAS, prevalence rate gradually increases from 1.1% in 2007 to 2.1% in 2013 for diabetes mellitus, and 8.3% in 2007 to 12.1% in 2013 for cardiovascular disease.

This literature study aims to analyze the impact of POSBINDU PTM as an intervention program to control risk factors of major non-communicable diseases (cardiovascular diseases, diabetes mellitus, and particular cancer) through an integrated community-based program in Indonesia.

This literature study uses secondary data from the literature review with qualitative approach and descriptive analysis. This study emphasizes the analysis of POSBINDU PTM risk factors monitoring and screening impact to decrease non-communicable diseases prevalence rate in Indonesia.

The study about the implementation of POSBINDU PTM in Depok, Indonesia in 2002-2006 namely "Demonstration Area" to develop non-communicable diseases control program showed that the intervention had significantly reduced the prevalence of several common risk factors, such as obesity, hypertension, hyperglycemia, hyper cholesterol, and high risk or combined risk factors (having three or more risk factors) and also considerably reduced the prevalence of diabetes mellitus. The success of the intervention becomes the benchmark for the government to start establishing POSBINDU PTM in the entire regions in Indonesia. It is notified that until now, 10,001 POSBINDU PTM are already accessible in the rural regions in Indonesia such as in Maluku in 2014 and Nusa Tenggara Timur in 2015. The increasing number of POSBINDU PTM indicates the improvement of health service in term of community participation to support promotion and preventive programs of early detection for common risk factors of major non-communicable diseases (such as overweight, hypercholesterolemia, hypertension, hyperglycemia, unhealthy diet).

POSBINDU PTM is a possible method to change Indonesian peoples lifestyle to start focusing on the promotive and preventive efforts that could reduce the non-communicable diseases risk-factors reflected through behaviors and lifestyles. POSBINDU PTM should be supported by the development of health-oriented public policy, non-communicable diseases risk factors surveillance activity, and the creation of conducive environment that supports the non-communicable diseases control efforts through the involvement of various institutions and social communities. If all elements are well-integrated, the awareness and willingness of people to commit in healthy lifestyle could be expected to rapidly grow. So, the healthy young generation could be embraced in order to prevent non-communicable diseases on the old generation in the future.
Medical imaging is one of the most common and overused diagnostic techniques used today and it is costliest. Many private health providers provide this medical imaging service. Most of their patient was referred by state health providers. Before National Health Insurance implementation in 2014, patients would pay for this high-cost medical imaging mostly by out of pocket.

This study aimed to analyze the impact of National Health Insurance implementation in the existence of private clinic providing high-cost medical imaging.

This is a descriptive study which participated by 23 patients which came to a private clinic to use MRI.

This study showed that all respondents who use MRI is a patient who came for a referral. This is consistent with the majority (73.9%) of respondents that said they will use MRI only when requested by a physician to perform an MRI examination. The majority of referrers are hospital doctors (87.0%), the rest are referred by physician practices. In order to improve the utilization of MRI, clinics need to cooperate with the referring party, considering all respondents MRI examination came as a referral. Indicated intention to perform voluntary MRI does not appear because the majority of respondents stated that it would only examine when requested by a doctor.
The Influence Of Iron Tablets Supplementation And Antenatal Care With Neonatal Mortality

Nurmala Selly Saputri
Nurmala Selly Saputri; Pandu Riono
SMERU Research Institute
Indonesia
nsaputri@smeru.or.id

SDKI 2012 results in the last five years shows an increase in antenatal care coverage in Indonesia. In addition, more than 75 percent mothers had received iron tablets during pregnancy. However, the neonatal mortality trend in Indonesia experienced a slowdown rate. Moreover, coverage of neonatal mortality in infant mortality has increased over time.

Aim of this study is to determine influence of iron tablets supplementation and antenatal care with neonatal mortality in Indonesia.

The population of the SDKI 2012 is all households that can represent the 33 provinces in Indonesia, while the sample analysis is all births that occurred in the last five years before the survey and were analyzed using multiple logistic regression.

The result shows that iron tablets supplementation on pregnant women give protective effect on neonatal mortality. Apparently, there are different effects of iron tablets supplementation in mothers who perform and not perform antenatal care. The odds ratio of not taking iron tablets increase the risk of neonatal death 1.4 times higher for mothers with antenatal care while the effect not taking iron tablet supplementation in pregnant women increases the risk of neonatal mortality of 13.4 times higher for mothers with no antenatal care. The interaction shows strong effect of iron tablets supplementation to pregnant women against neonatal mortality in Indonesia. Iron tablets supplementation gives important role to pregnant women in reducing neonatal mortality in Indonesia. Special efforts are needed so that every pregnant woman in Indonesia takes iron tablets during pregnancy. Another priority is a program that is able to reduce anemia in women as a teenager.
The Interest Of Fogging In Eradicating Dbd In Kamal District Community
Bangkalan Madura, East Java

Firdausi Ramadhani
Firdausi Ramadhani
Airlangga University
Indonesia
firdausirmd@yahoo.com

Based on health profile data Bangkalan total of 2010 cases of dengue fever sufferers as much as 709 cases. In 2011 had declined the case that the number of 226 patients and one person is declared dead. In 2012 again experienced a surge that is 397 cases and six confirmed deaths (Profile kesehataan Bangkalan 2010-2012). Bangkalan District Health Office had tried many programs to solve dengue cases. But so far that people know that for the eradication of dengue through fogging or spraying. Though fogging is not good if applied too often (Depkes RI, 2005). The purpose of this study describes the public interest against fogging to combat dengue.

The public needs to know that fogging is not the right solution to combat dengue. So they have to get education on the dangers of fogging and appropriate solutions to overcome and prevent dengue.

This study uses a qualitative method. The subject of research is that there are people in the district Kamal.

Communities in the District Kamal, Bangkalan, preferring and interested fogging as an effort to cope with dengue. From interviews and observations results it shows that they do not know if the fluid present in the fogging liquid is harmful to health. They do not know the impact of fogging. Every incidence of dengue, there are many people who apply for fogging at the health center. They feel neglected if the request is not carried out for the fogging. The public needs to know that fogging is not the right solution to combat dengue. So they have to get education on the dangers of fogging and appropriate solutions to overcome and prevent dengue.
The Issues And Implementation Problems Of BPJS Health Program In Public Health Center In Banjarbaru

Fauzie Rahman  
Fauzie Rahman; Vina Yulia Anhar; Syamsul Arifin  
Administration Health Policy Departement, Public Health Study Program, Faculty of Medicine, University of Lambung Mangkurat Indonesia  
fauzierahmankmpk2010@gmail.com

Implementation of the National Health Insurance Scheme (JKN) is organized by the Executive Agency for Social Security (BPJS) health began in January 2014 which is the transformation of PT.ASKES. The program is being expected to provide positive health services in the community, particularly in the areas of health financing so that the service can be enjoyed by every community in the absence of a complaint with the services provided. Given a new program is implemented, it is necessary to evaluate the effort level of basic services in this health center to find out the problems and constraints faced in order to be given in accordance with the policy recommendations in the health center needs.

to describe the problems and constraints at the beginning of the program implementation in health centers throughout JKN Banjarbaru.

This study is a qualitative research with case study design to explore the issues those are focus of research. The respondents are the head of health centers throughout Banjarbaru as the key informants. Data were collected through in-depth interviews with the key informants.

Results: Some of the obstacles and problems faced by health centers throughout Banjarbaru at the first six months of implementation JKN, among others less of public knowledge and understanding of the procedures and service utilization of JKN caused by lack of socialization, online system report is used meantime there is much limitations of the internet using with PCare in every clinic, health care distribution cause much less drug availability due to the number of patients who use the service increase and less of personnel or human resources who are competent for management of the Health Information System (HIS) into the factors that lead to weakness of SIK especially in terms of data management for management program and JKN membership.

Conclusion: The upgrading system for basic level quality of health care facilities and health workers have to walk synergistically with JKN for the effectiveness, efficiency, affordable and equitable health programs. Moreover, the addition of facilities and infrastructure support services to participants in JKN and socialization and guidance from the Department of Health to the health center and the community about the program JKN is expected to have a positive impact for improving the quality of care in health centers.
Diarrhoeal disease are a major cause of morbidity and mortality in developing countries. Survey results of 1992 in Indonesia showed that 23% of children died because of diarrhea. In Tana Toraja out of 20 kinds of causes of death that were observed in hospital, the death because of diarrhea due to 20%. Although prevention efforts have been attempted, but until now diarrheal diseases are still the leading cause of death for children under five. This is because of less knowledge of the mothers in the managing diarrhea.

The purpose of this study is to obtain knowledge and how mothers of children under five treating diarrhea for the children under five at the public health center in Tondon.

This is an effective observational study. The samples were fifty two mothers of children under five who suffering from diarrhea who got treatment at the public health center Tondon from August to October 2000. Data were obtained by interviews of the mothers by using a list of questions that have been prepared before.

The results of the research showed that 63.4% of respondents had less knowledge, 30.8% had enough knowledge and 5.8% had good knowledge about the diarrhoeal disease, while the respondents' knowledge about the treatment of diarrhea showed that 59.6% of respondents had enough knowledge, 21.2% had good knowledge, and 19.2% had less knowledge.

All respondents continued to provide fluids and food to a toddler who suffering from diarrhea. 65.38% of the 52 respondents provided less food than usual. Frequency of feeding showed that 76.9% of respondents provided food three times a day. The usual type of food given to children under five who suffering from diarrhea showed that 67.3% of respondents gave them porridge.

In general the respondents gave them more fluids than usual (96.2%). Frequency of giving fluids showed that 65.4% of respondents gave fluids to children under five every time they defecation. The usual type of fluid given is water (75%). The treatment efforts that usually done by respondents besides giving fluids and food is by giving traditional drugs (13.46%) and medical drugs (1.92%).

Therefore the health workers expected to provide education on diarrhoeal disease, the type and the right amount of food given to children under five who suffering from diarrhea and effective types of fluids to prevent dehydration.
The Overview Of Social Marketing Planning Of Voluntary Counselling And Testing (VCT) Of HIV-AIDS Program In Ciputat Health Center, 2014

Fitria
Surotul Ilmiyah, Fitria
Syarif Hidayatullah Jakarta Islamic State University
Indonesia
fitriakarim26@gmail.com

HIV-AIDS epidemic increased remains a serious public health problem in the world, including Indonesia. Voluntary Counselling and Testing (VCT) is a public health strategy to anticipate the spread of HIV infection. Ciputat Health Center is the first health center in South Tangerang which already have VCT services. However, it found a problem in practice.

This study aims to describe the social marketing planning of VCT (Voluntary Counselling and Testing) of HIV-AIDS program in Ciputat Health Center, 2014.

This research was a qualitative research with a descriptive approach. Informants were selected by purposive sampling. It obtained by 7 informants, including Responsible Person of VCT program at the health center, head of the health center, health promotion Workers, South Tangerang Health Department, NGO partner, VCT patients in Health Center, and non-VCT patients.

The results showed that Ciputat Health Center has not made an optimal social marketing plan of VCT HIV-AIDS programs because there is no authentic evidence of VCT social marketing proposal legalized by Head of Puskesmas. This Health Center just support the planning of target audience profile, factors influencing adoption of behavior, develop a strategic marketing mix (4Ps), outline a plan for monitoring and evaluating, establish budget and find funding source, plan for campaign implementation and management. It does not describe background, purpose and focus, situation analysis, marketing objectives and goals, positioning statement. This proves that the low interest of the community due to an unoptimal social marketing plan. It is expected that health center can do a social marketing planning efforts for VCT HIV-AIDS program in detail of describe background, purpose and focus, situation analysis, marketing objectives and goals, positioning statement and documented in the form of social marketing proposals validated by the Head of Health Center as guidelines for the implementation of social marketing.
The Prevalence And Associated Factors Of Noise Induced Hearing Loss Among Fogging Machine Operators In Dewan Bandaraya Kuala Lumpur (DBKL), Malaysia

Ru Bin Seah
Ru Bin Seah; Wan Nur Farra Ain; Suhanya A/P Vinayagam; Ahmad Zaidi; Nasrin Aghamohammadi; Norlaili Abdul Aziz
University Malaya, Malaysia
Malaysia
shrub1n@hotmail.com

Occupational noise is deemed as one of the commonest occupational hazards. It was revealed in 1990s Audiometric (hearing loss test) survey by Department of Occupational Safety and Health, Malaysia (DOSH) that about 26.9 percent of industrial workers had a hearing threshold of 3000 - 6000 Hz which was greater than normal and 21.9 percent of workers were already suffering from detectable hearing loss. Fogger machine operators exposed to loud noise while they perform vector control activities. The effects of noise are often underestimated because the damage is an insidious process. As a result, the workers do not appreciate the serious impact of noise until noise-induced hearing loss (NIHL) happens. Prevention through workers education and institution of hearing conservation program are the main intervention that can reduce occurrence of NIHL.

General objective: To determine the prevalence and associated factors of NIHL among fogging machine operators in Dewan Bandaraya Kuala Lumpur (DBKL). Specific objective: 1) To describe the socio-demographic data of the fogging machine operators in DBKL. 2) To determine the prevalence of NIHL among fogging machine operators in DBKL. 3) To determine the associated factors of NIHL among fogging machine operators in DBKL. 4) To compare the difference between baseline and annual audiograms at frequency of 4kHz of fogging machine operators in DBKL. This study used cross sectional method to study the prevalence of NIHL among fogger machine operators in DBKL. The total study population was 348 participants from March 2013 to May 2015. All the fogger machine operators were from vector control unit from 11 parliaments in DBKL territory. Descriptive analysis of the data was performed initially. Association of NIHL with associated factors was analysed using multiple logistic regression and reported as odds ratio (OR) with 95% confidence interval. The operational definition of NIHL in this study is 25dB or more threshold shift at frequency of 4kHz on audiometry assessment in bilateral ears. The independent variables studied were age, race, smoking status, length of service and existing hearing problem from the history. The annual audiogram of fogging machine operators was compared with the baseline audiogram at frequency of 4kHz with paired T-test.

The prevalence of NIHL among the fogging machine operators who are working in DBKL area was 46.4%. Only age is associated with NIHL in this study. 46.4% of workers had hearing loss on bilateral ear which was 4.7% lowered than the baseline audiogram. There was an increase in number of subject with normal hearing bilaterally from 27.6% in baseline audiogram to 29.4% in annual audiogram, which was about 1.8%. When comparing isolated ears between baseline and annual audiograms at 4kHz of more than 25dB threshold shift, there was an increasing trend seen. The right
ear hearing loss has increased 2.3% while the left ear hearing loss has increased 0.6%. There was a decrease in mean threshold shift on the right ear about 1.302 and the left ear about 2.201. Both findings were significant with p-value of 0.026 and <0.001 in right and left ears, respectively. The 95% CI for the right ear was 0.155, 2.449 whereas for the left ear was 1.059, 3.343.
Obesity is a global health problem caused by excessive accumulation of body fat increases the risk of chronic diseases. The prevalence of obesity continues to be risen. In Indonesia, the incidence of obesity tend to be higher in the adult population especially for civil servant.

This study aims to determine the differences in the proportion of individual characteristics, behavioral factors, nutrient and stress level toward obesity in civil servant at Directorate General of Employment 2014.

The study design is cross sectional. Obesity based on Body Mass Index (BMI) becomes the independent variable, whereas the independent variables are individual characteristic (age, gender, and income level), behavioral factors (physical activity and breakfast habit), nutrient intake (energy, carbohydrate, fat, and protein), and stress level. Data of dependent variable are retrieved through height and weight measurements, while data of independent variable are obtained by filling the questionnaire with interview. Data of food intake are collected by food recall 2x24 hours. Statistical analysis in this study using Chi Square Test.

Based on the results of univariate analysis, obese respondents are 54.1%. The average BMI is 27.33 +/- 5.05 kg/m2. The proportion of respondents which included in the category of adequate energy intake is 88.9%; carbohydrate intake 93.3%, fat intake is 52.6%, and excessive protein intake is 51.5%. The bivariate analysis showed significant differences between the proportion of energy intake, carbohydrate, fat and protein on the incidence of obesity.

Obesity is caused by the consumption of energy greater than expenditure of energy. The excess of energy which come from the carbohydrate, fat, and protein in the body is converted into fat and store in adipose tissue. If this happens continuously, the weight will increase and lead to obesity.

This study concludes that there are statistically in the proportion of energy, fat, carbohydrate and protein to obesity. It is recommended for employees in order to pay attention to food intake and physical activity.
The Quality Of Antenatal Care And Sociodemographic Factors Influence Of Neonatorum Asphyxia

Shrimarti Rukmini devy
Agustin Dwi Syalfina; Chatarina Umbul Wahyuni; Shrimarti Rukmini Devy
Departemen Epidemiologi Fakultas Kesehatan Masyarakat Universitas Airlangga Surabaya, Jawa Timur, Indonesia
agustinpipin2@gmail.com

Antenatal care is designed to promote, protect, and maintain the health during pregnancy and reduce maternal and neonatal mortality. The scope of antenatal care also includes the detection and special care for high risk cases as well as the prediction and prevention of complications during pregnancy and childbirth. Complications of pregnancy and childbirth causes of neonatorum asphyxia. Neonatorum asphyxia is a condition where the baby can not breathe spontaneously and regularly after birth. Neonatorum asphyxia cases in Mojokerto district has 46.9% in 2010 and 39.7% in 2014.

This aim of this study was to analyze the effect of the quality of antenatal care to neonatorum asphyxia in Mojokerto.

The type of this study was observational analytic with case control design with a sample of cases and controls amounted to 80 babies. Data was analyzed using univariate, bivariate and multivariate analysis with logistic regression.

The results of this study showed that the quality of antenatal care was significant with neonatorum asphyxia (OR=8.556; 95%CI:2.777-26.358). Confounding variables associated with neonatorum asphyxia were maternal occupation (OR=4.558 ; 95%CI: 1.391-14.298), primary education (OR=21.620; 95%CI: 1.932-241.886), secondary education (OR=20.977; 95%CI: 1.819-241.872). The conclusion quality of antenatal care has effect of nenatorum asphyxia. Suggestions can be drawn based on the results of this study are for health workers are expected to do health education to the public and families about the importance of antenatal care and antenatal care services that should be obtained from health workers.
The Relationship Between Age Of Women Working With Using Of
Contraceptives In Sukabumi, West Java, Indonesia

Martya Rahmaniati
Martya Rahmaniati
Universitas Indonesia
Indonesia
tyarm@ui.ac.id

The use of contraceptive methods is divided into 3 types, long-term contraceptive methods, short-
term contraceptive methods and traditional. One of the factors that influence the use of
contraception is socio-demographic factors.

The aim of this study was to determine the relationship between the use of contraceptives with age
in women factory workers in Sukabumi.

The Method is a cross-sectional study, the sample was female factory workers in Sukabumi. with a
total sample of 100 women. Statistical analysis by univariate and bivariate analysis and qualitative
analysis, by conducting in-depth interviews to respondents.

Results from this study are mostly 59% of women do not use contraception factory where most were
from age <35 years old and married. There are 21% of women who use long-term contraceptive
method instead of the bivariate analysis results showed that there were differences in age to use
contraception.

Theres a significantly different results in a group of women who uses a long-term contraceptive
methods and women who are not using contraception. Qualitative results stated that most of the
women factory workers know what types of contraceptives based on information from health
professionals (midwives) so that they use contraceptives only derived from health workers.

Factors influencing the use of contraceptives is the socio-demographic and socio-psychological.
Long-term methods of contraception is contraception that is used in a period of more than two
years. Aged woman factory worker showed no difference in the method of use of long-term
contraceptive methods and counseling from health workers affect the use of the method of use of
contraceptives.
The Relationship Between Education Level And Age Of Mother With The Use Of Contraceptive Tool (Pill) In Paringin City, Balangan District, South Kalimantan Province, Indonesia

Vina Yulia Anhar
Vina Yulia Anhar; Fahrini Yulidasari; Fauzie Rahman; Andini Octaviana Putri; Nur Laily
Lambung Mangkurat University
Indonesia
anharvinayulia@gmail.com

Family Planning program is an effort to preventive health care of the most basic and primary. Based on Basic Health Research or Riskesdas (2013) the proportion of the use of family planning program at-risk groups ie groups of married women aged 15-19 years, amounting to 46% of this figure is still lower when it is compared with the Development Plan target (2014) ie 60.1%. Level of public education as a major cornerstone in understanding the issues of family planning and contraception determine the success of the Institution of National Population and Family Planning (BKKBN) program. Education is the primary means and the successful implementation of family planning program purposes. Age also affects women use contraception. Young women tend to use injection method, pill and implant. Meanwhile, those who are older tend to choose a long-term contraceptive devices such as IUD, female sterilization and male sterilization. This research study was aimed to determine whether there is a relationship between the level of education and age of the mother with the use of contraceptive pill in Paringin City, Balangan District, South Kalimantan Province.

This study used observational method with cross sectional approach, to study the relationship between level of education and age of the mother with the use of contraceptive pill. The population in this study were all women who use contraception in Paringin City, Balangan District on April 2015. The samples were taken by 50 people who are considered to represent the location of the research. The instrument used was a questionnaire. Samples were taken by using purposive sampling technique. Primary data in this study were analyzed using chi-square test (CI: 95%, Î±: 0.05).

Based on the results of the univariate analysis noted that of the 50 respondents who have low levels of education (elementary school until junior high school level) as many as 23 respondents (46%) and highly educated (senior high school until college level) as many as 27 respondents (54%). Respondents aged 20-35 years as many as 30 respondents (60%) and age > 35 years as many as 20 respondents (40%). Respondents who used contraceptives instead of the pill as many as 28 respondents (56%) and the contraceptive pill users were 22 respondents (44%). From the results of the chi square test known that the 11 respondents with low levels of education use contraceptives instead of the pill. While 12 respondents who have low levels of education using contraception pill. A total of 17 respondents with higher education levels using contraceptives instead of the pill. While 10 respondents who have higher education levels using contraceptive pill.

Chi-square test results also showed that 13 respondents aged 20-35 years using contraceptives instead of the pill. A total of 17 respondents aged 20-35 years using contraception pill. There are 15 respondents aged >35 years using contraception instead of the pill. A total of 5 respondents aged 20-35 years using contraception pill. Based on bivariate analysis using the chi-square test showed
that there was no correlation between level of education and the use of contraceptive pill (p-value: 0.283 > 0.05; OR: 0.539). However, from the results of the bivariate analysis showed that there is a relationship between age and the use of contraceptive pill (p-value: 0.027 < 0.05; OR: 0.255).
The Relationship Between Mother Occupation Status, Father's Height, Mother's Height, And Low Birth Weight (LBW) Status With Stunting Incident On Child Under 2 Years In Hulu Karias Public Health Center, Hulu Sungai Utara District

Andini Octaviana Putri  
Atikah Rahayu; Andini Octaviana Putri; Fahrini Yulidasari; Fauzie Rahman  
Public Health Department, Medical Faculty, Lambung Mangkurat University  
Indonesia  
oputriandini@gmail.com

Indicators of Millennium Development Goals (MDGs) in Indonesia, one of which is the attempt to decrease the proportion of people who suffer from hunger by half in period 1990 to 2015, are of particular interest in this regard is child under 2 years (baduta) that less nutrition and malnutrition. According to Riskesdas 2013, the prevalence of stunting in South Kalimantan reached 45% and can be said to be a public health problem with a very bad category because of the prevalence of stunting 40%. Factors that affecting stunting categorized into three factors, namely basic actors, underlying factors, and immediate factors.

This study aims to clarify the relationship between mother occupation status, fathers height, mothers height, and low birth weight (LBW) status with stunting incident on child under 2 years.

This research was analyzed using quantitative methods with observational analytic design through cross-sectional approach. The sample of this research was the mother that has a child under 2 years as much as 117 respondents. The independent variables were used as treatment in this research were mothers occupation status, fathers height, mothers height, and low birth weight (LBW) status and dependent variable were the stunting incidents. The relation of independent and dependent variables was analyzed by chi-square test.

The result of this research showed that there was no relationship between mother's occupation status (p=681), fathers height (p=0.820) and mothers height (p=0.170) with stunting incident. Father and mother who have jobs tend to have better economic status. Economic status will affect the ability of family nutrition and the ability to access health care. Genetic factors foundations on which to achieve the growth process. If mom and dad is short, baduta also have the risk of having a short body, but height is influenced by many factors, not only genetic factors but also influenced by nutrition and also illness. However, there was a relationship between low birth weight (LBW) status with stunting incidents on children under 2 years (p=0.029). Baduta with low birth weight (LBW) had 6.100 times the risk for experiencing baduta stunting compared with normal birth weight. Babies with low birth weight (LBW) will increase the risk of morbidity and mortality for infants vulnerable to infection. Babies with low birth weight have a higher mortality rate than in infants weighing more than 2500 grams. Birth weight in general strongly associated with fetal death, neonatal, and postneonatal, baduta and infant morbidity and long-term growth. Therefore babies with low birth weight are more likely to experience intrauterine growth retardation and baduta with BBLR would have anthropometric size less on development.
The Relationship Of Pre-Eclampsia History And Maternal Age With Low Birth Weight (LBW) For Infant In Lakipadada Hospital Of Tana Toraja In Period January - December 2008

Adriana Mapandin
Adriana Mapandin
Akbid Sinar Kasih Toraja
Indonesia
amapandin@gmail.com

LBW represents a factor that contributes in enhancing infant mortality. LBW in Indonesia around 1.66%. The maternal factors that affecting LBW includes maternal age and disease.

This study aimed to know the incidence of LBW and the relationship of LBW incidence with pre-eclampsia and maternal age.

The type of this study is descriptive analysis with cross sectional design. The sample size was obtained by using a hypothesis test for two sample proportions and obtained a sample of 71 cases and a large proportion of cases and control samples are 1:1 so that the total sample was 142 delivered maternal. Sampling was done by using purposive sampling and random sampling by taking into account inclusion and exclusion criteria. Data were analyzed by using 2x2 tables and statistical test Chi Square/ Yates's Correction

The results of study showed that the incidence of LBW in 2008 is quite large, there is no relationship between LBW with pre-eclampsia, and there is a correlation between LBW with maternal age.
The Role Of Social Capital For Community Empowerment In Reducing Maternal Mortality Rate Related To P4k-Program Perencanaan Persalinan Dan Pencegahan Komplikasi (Labor Planning And Complication Prevention Program) In District Jombang

Lusyta Puri Ardhiyanti
Lusyta Puri Ardhiyanti
Airlangga University
Indonesia
lusyta.nugroho@gmail.com

The Role of Social Capital Community Empowerment against maternal mortality incidence of the need for changes in behavior through Program Planning and Complications Prevention of Childbirth (Program Perencanaan Persalinan dan Pencegahan Komplikasi = P4K) with the approach of social capital

The purpose of this research was to find a model of social capital in the community empowerment Program Planning and Complications Prevention of Childbirth (Program Perencanaan Persalinan dan Pencegahan Komplikasi = P4K) in efforts to reduce the Maternal Mortality Rate (MMR) in Jombang.

The design used was cross sectional study with analysis unit of pregnant women who were at the public health centre of Jombang with the sample of 296 people. The sampling Method was multistage random sampling. The Instrumen used was a questionnaire that has been tested for validity and reliability. The data collection was analyzed by using Mann Whitney statistical test, logistic regression, SEM confirmatory analysis

The results showed that the Social Capital in both areas are areas that coverage Program Planning and Complications Prevention of Childbirth (Program Perencanaan Persalinan dan Pencegahan Komplikasi = P4K) is reached and which has not been achieved, were no difference, for the empowerment there were significant difference with p-value 0.001 < 0.05 of the 12 indicators of social capital that most influential on the community empowerment were values, sense of identity, norms, trusts systems, cooperation, attitudes, perceptions and expectations. The approach models that could be generated from this study were the factors of trust and norms of a fit model to describe the social capital in Jombang district. strengthening social capital in promoting community empowerment was as a very important renewal approach. Social Capital could move community empowerment ini jombang district in decreasing Maternal Mortality Rate (MMR)
The Role Of VEGF-A And VEGF-R2 In Predicting 2-Year Disease Free Survival Among Patients With Epithelial Ovarian Cancer Stage II-IV In Dharmais Cancer Hospital

Bambang Dwipoyono

Bambang Dwipoyono; Marselina Irasonia Tan; Mondastri Korib; Siti Boedina Kresno

Cancer Dharmais Hospital

Indonesia

bdwipoyono@gmail.com

Ovarian cancer is amongst the fatal cancers among women. A currently effort to solve the problem of recurrence and mortality due to epithelial ovarian cancer is through targeted therapy, specifically those that affect the formation of new blood vessels (angiogenesis) and are starting to undergo testing, however there are no clear parameters in the selection of candidates to begin administration of this treatment.

Evaluating the role of expression of VEGF-A, VEGFR-2 as predictors of disease free survival with 2 year post treatment surveillance to late stage ovarian cancer patients. The design of this study is cohort retrospective of late stage epithelial ovarian cancer patients who receive complete treatment at Dharmais Cancer hospital from 2008-2012. Epidemiologic and clinical pathologic data were taken from medical records of these patients. Expression of VEGF-A, VEGFR-2 were examined at 2 levels, protein level with immunohistochemistry tests using commercial antibodies from Santa Cruz, and mRNA level which was extracted using RT-PCR with a Zyber Green kit, aside from sequencing using the Applied Bio Systemkit. Kaplan Meier and log rank test was performed to calculate the disease free survival. Cox regression analysis was used to assess the association of residual tumor and other risk factors with the risk of recurrence in 2 year follow-up.

Of 225 cases with epithelial ovarian cancer, only 65 fulfilled the inclusion and exclusion criteria to be evaluated. the inclusion criteria were new cases and received complete treatment based on the Dharmais Cancer Hospital protocols. Median disease free survival of all subjects (65 cases) was larger than the 24 months, and the overall 2-year disease free survival (DFS) rate was 50.7%. There were, however, only 20 cases (specimens) underwent molecular tests. Median disease free survival of the 20 patients was 20 months, which is lower than the total 65 subjects. Likewise, for the overall 2-year disease free survival (DFS) rate was 48.1%. VEGF-A expression at mRNA level was not positively associated with its expression at protein level. Cases who expressed VEGF-A at protein level were at lower risk for recurrence compared to those who did not express, however, this phenomena might be due to the fact that there were 3 subjects who expressed VEGF-A at protein level who were lost to follow-up. On the other hand, those who had VEGF-A expression at mRNA level were associated with higher risk for recurrence. Those with VEGF-R2 expression at protein level were at higher risk of recurrence. However, all the recurrent effects due to the afore-mentioned genes were not statistically significant. There were no mutation or polymorphism detected along the VEGF-A sequence fragment. Expressions of VEGF-A and VEGF-R2 were shown to be independent from the clinico-pathology factors, i.e.: age at diagnosis, stage, residual tumor and histopathology types.
Expressions of VEGF-A and VEGF-R2 were showing a tendency of higher risk of recurrence among epithelial ovarian cancer patients. Therefore, an attempt to use the targeted therapy using VEGF-A and VEGF-R2 among these patients is worth to be explored and considered in order to get better prognosis.
The Size Of The Working Tools, Anthropometry And Musculoskeletal Disorders (Review At The Tailors)

Noorce Christiani Berek
Noorce Christiani Berek and Aftridesiana Marrylin
Faculty of Public Health, University of Nusa Cendana
Indonesia
tiani.tarigan.79@gmail.com

The tailor is a worker who does work in groups or individually. Working process of making garments include the process of measuring body size, making patterns, cutting fabric, sewing and refinement. All the work processes likely to cause MSDs because the size of the working process tool that did not correspond to the length of the leg so that workers working with bowed and bent in a long time. This ultimately leads to muscle pain or musculoskeletal disorders in the worker's body.

This study aims to determine the relationship between the size of the working tools of the suitability of anthropometry and musculoskeletal disorders between tailor in Kelurahan Solor, Kupang.

This type of research is an analytic survey research with cross sectional design. The population in this study was all tailor workers who work in Kelurahan Solor, Kupang, especially on the road Udayana as many as 35 tailors. The whole population being sampled in this study. Data were analyzed using chi square test.

Research findings show that there is a significant relationship between the size of the working tools of the suitability of anthropometry (p = 0.020) with musculoskeletal disorders. It is then suggested to workers should work with the appropriate office chair with anthropometry workers and do break when already feeling tired or stressed muscles of the body by stretching and relaxation.
The Student Nutritional Status And Satisfaction Level Of The Food System Maintenance In Madrasah Aliyah Insan Cendekia, Gorontalo

Djunaidi M. Dachlan
Djunaidi M. Dachlan; St. Fatimah; Astri Ivo Dangkua; Yessy Kurniati
Nutrition Department, Public Health Faculty, Hasanuddin University
Indonesia
yessy.kurniati@gmail.com

Implementation of institutional food can be used as a means for enhancing the nutritional status citizens if the institution can provide food that meets the basic principles the implementation of institutional food

The research objective was to determine the nutritional status, and level of student satisfaction towards food in the food delivery system in in Aliyah Human State Scholar, Gorontalo

This type of research is research quantitative descriptive approach. The population in this study is total student / student Madrasah Aliyah Insan Cendekia, Gorontalo. Target population is the student / grader eleven the number of 111 people. The sample is 55 students. Samples were taken with proportional random sampling method.

The Results showed that intake of energy, protein, fat and carbohydrate of the student is still in the category less than adequacy rate recommended nutrition. The nutritional status of students is 89.09% in category normal, underweight 5.45%, 1.81% over weight and 3.63% obese. The average level of satisfaction with the menu presented very satisfied although there were respondents who do not feel satisfied in terms of texture and a portion of some of the menu presented. In conclusion intake macro nutrition of the students does not meet the recommended dietary allowance figures, Average nutritional status to normal nutritional status and degree of satisfaction on food presented very satisfied.
The University Kuala Lumpur Royal College Of Medicine Perak (UNIKL RCMP) Students’ Social Entrepreneurial Activities In Post Typhoon Haiyan Communities In The Philippine

Abdul Karim Russ Hassan
Abdul Karim Russ Hassan, Nik Asyraf Nik Aziz, Awang Iskanderzulkarnain Layari, Osman Ali
Universiti Kuala Lumpur Royal College of Medicine Perak
Malaysia
abdulkarimruss@gmail.com

In 2013, Philippine was struck by strong Typhoon Haiyan that caused loss of lives and devastation of houses, farmland and other properties. UNIKL RCMP in collaboration with Malaysian Relief Agency (MRA) sent a team for medical relief mission to the affected islands of Cebu and Bantayan.

In May 2015, ten members of medical students with their supervisors organised a mission to rehabilitate the communities affected by the typhoon through entrepreneurial project of library construction, educational guidance, mobile medical clinic and health promotion.

Construction materials for the library were purchased from the local company and our students assisted in the construction of the building. They were involved in filtering of the cement and making the cement blocks. They organised in making of the bookshelf with the carpenter and gathered reading materials available to the students. The students were involved in mobile medical clinic for the communities that includes health screening, treatment for minor medical condition and health promotion among the communities. They were involved in the promoting proper hand washing, hair shampoo for lice eradication and oral hygiene.

The library was completed with the assistance of the carpenter through improvement of the library space. The library was fitted with the tables, chairs and board to make it ready for the students to utilise during their study. The common medical condition among the communities includes upper respiratory tract infection, gastritis, skin infections and hypertension. Most of those with hypertension were non compliance with regular treatment. These social entrepreneurial activities would provide the students with the platform to gain experiential knowledge in organising their community project and to promote the spirit of altruism among them.
The Value Of Family In Health Seeking Behaviour Pattern Between Toddlers And Elderly In Rural Indonesia

Nuzulul Kusuma Putri
Nuzulul Kusuma Putri
Universitas Airlangga
Indonesia
putri.nuzulul@gmail.com

The existence of ageing population became another burden of family. Meanwhile take responsibility of its toddler, family still have responsibility of its previous generation.

This study was tried to explain how low income family in Indonesia treat the health need of both group.

This is descriptive study with cross sectional design applied. Two district of Indonesia with different ethnicity but same paternalistic structure were chosen to be the population. There were 5,037 poor household participated in this study after its village selected through stratified random sampling (d = 10%).

This study showed that more than 28% of family participated was considered into big family which live together with its toddlers and also with its elderly. The number of elderly (73%) who faced health problem was more than toddler (27%) who got sick for last 6 months. Unfortunately, most of mother (which supposed to be main care giver in the family) were more concern about its toddlers. This study revealed that toddlers health is in the top of mothers mind. The seconds line up is her parents health and then parents in laws. The perception of severity between age group was same but transformed into different health seeking behaviour pattern. When toddler got sick, family will directly bring them to professional healthcare. But it was better to take the self-medicine first for elderly. Elderly got further treatment in health facility if they failed with the self-medicine. Unexpectedly, parents in law (65%) were prioritized to get healthcare than parents (35%). Population of both group are dealing with different health situation. The value of toddlers is more important than elderly. Parents and parents in laws also have different value. The family value will determine the health seeking behaviour. The value of elderly should be increase to make this age group not to be neglected population.
Transovarial Infection Rate And Serotype Of Dengue Virus In Aedes Aegypti Mosquito In Different Endemicity Area In Kupang City NTT Province

Wanti
Wanti; Oktovianus Sila; Irfan; Eni Sinaga
Health Polytechnic, MoH Kupang
Indonesia
trivena78@yahoo.com

The incidence of dengue in Indonesia has increased every year and now has become an endemic disease in almost all provinces included in NTT Province, where cases are highest in Kupang. Prevention and control incidence / outbreak of dengue should be accompanied understanding of epidemiological and entomological aspects include Dengue virus infection transovarially on Aedes sp.

This study will describe transovarially infection rates (TIR) and serotypes of dengue virus in areas with different endemicity of dengue cases in the city of Kupang.

This study will be conducted in four villages endemic, sporadic and free of dengue in Kupang city. Samples used in the inspection head squash with ISBC method is 30 female mosquitoes per area of the egg in 4 villages that dreearing in Parasitology Lab UNIVERSITAS GADJAH MADA. The data presented in the table / graph and photograph then analyzed descriptively to describe transovarially infection rates and serotypes of dengue virus.

The results showed that the TIR can be found at all levels of endemicity of DHF but the highest is in dengue endemic areas. TIR dengue-free areas have 11.5%, 6.7% sporasis, and both endemic 1 and 2 was 13.3%, with an average of TIR for Kupang 12.3%. TIR shown by the brown color is formed on the head squash with ISBC method. Serotypes of dengue virus in the city of Kupang only found Virden-1.

This study concluded that both in endemic areas, sporadic and free all found their infection with TIR transovarially highest in endemic areas with the same serotype is Virden-1. Expected precautions dengue and dengue vector control is not only done in endemic areas, given the TIR in all areas so the transmission of DHF may also occur in all regions.
Unit Cost And Negotiation: A Rational Alternative INA-Cbg’s Rates For Hospitals (A Literature Review)

Murhaban

Faculty of Public Health Universitas Indonesia
Indonesia
nyakmurhaban78@gmail.com

Since the date of January 1, 2014 JKN applied simultaneously throughout the territory of Indonesia. Based on the President of the Republic of Indonesia Regulation No. 111 of 2013 set out two ways the system of payments to health care providers that capitation and INA-CBG’s. Difference in hospital rates and the rates set by the manager of the health insurance before (JKN) applied also never happened. But in the earlier of 2014 the problems again disputed even in mass media or online media. The direct impact of INA-CBGs rates perceived by some private hospitals which cooperate to provide health care for participants JKN.

Getting solution a rational rates that BPJS has enough financial resource to pay for health facilities and hospital does not have financial shortage in running its operational.

This article discusses the study of the rational rates for hospitals through health economic theory and research that has been done previously collected from various references. Literature were analyzed and compared in the context of environmental policy health insurance system in Indonesia. Through theoretical explanations and empirical experience of getting alternative and appropriate recommendations to obtain a rational rates for hospitals.

All the countries that apply tariffs based on DRGs (INA-CBGs) continue to improve the tariff system due to reach a rational rate is influenced by various factors. In general it can be said that the rate of health care between the hospital will be different, due to the status of the hospital, the cost of the unit, geographic location, and the hospital management system.

Cost is an important component in the tariff. The cost is usually not be the main driver of pricing for many hospitals. A rational pricing system, requires a method to determine fully included and additional costs of each item will be fare.

In addition to the cost component, in setting tariffs both parties also need to negotiate to reach an agreement, because it is not necessarily the INA-CBGs rates already meet all the needs of the total cost of a private hospital. The worst scenario that the plan tried to adopt DRGs in one size fits all hospitals.

The main key of the rates are the hospitals have basic calculation based on unit cost rates and the base rate BPJS have CBGs INA is then conducted negotiations so get common ground that can meet the needs of both parties.
Using Logic Model For Planning Programme To Intervene Gender-Based Violence And Unplanned Pregnancy Among Adolescents

Sajaratulnisah Othman

Sajaratulnisah Othman; Yut Lin Wong; Amalina Mustaffa; Vickneswari Ayadurai; Betty Siew Peng Yeoh ; Fadzilah Hanum Mydin; Julia Suhaimi; Khasnur Abdul Malek; Suraya Abdul Razak; Sharina Mohd Razali; Wah Yun Low

University of Malaya
Malaysia
sajaratul@ummc.edu.my

Young people growing up in urban poor communities are vulnerable to violence exposure and unsafe sexual activities. They have a higher fertility rates than other youth urbanites, with women risk having less education and autonomy; have scanty knowledge of and access to sexual and reproductive health services (SRH).

The Knowledge Transfer Programme of Taman Medan (KTP-Taman Medan) is an intervention program dealing with some of the issues face by urban poor youths. This programme specifically focuses on unhealthy relationship leading to gender based violence (GBV) such as dating and domestic violence; together with the issues of teenage pregnancy which is in the rise. There is a close connection between violence and teen pregnancy. Both conditions are preventable.

By the end of the two-year programme, the community will have youth who are exposed to GBV and SRH awareness campaign, established a group of youth leaders that will provide peer education, and an established network towards intervention of youth GBV and SRH.

A logic model is used to provide framework in program planning, implementation, evaluation and communications. The model provide a systematic and visual way to present and share the understanding of the relationships among the resources required to operate this program, the activities planned, and the changes or results aimed to achieve. Basic assumptions utilized are as follows; 1) youth are vulnerable to different types of abuse; 2) risk of violence occurs at individual, relationship, community and societal level; 3) youths experiencing violence have difficulty for a successful transition to adulthood; 4) unplanned pregnancy could be one of the impacts of dating violence that increases the risk to negative social and medical outcomes to mother and child; 5) unplanned pregnancy is preventable. The logic model illustrates the resources, activities, output and outcomes that this programme planned to achieve.

Based on existing evidence, this programme involves collaboration between three universities (University of Malaya, International University of Malaya Wales and University of Teknology Mara), NGO (All Womens Action Malaysia-AWAM) and the local public health centre (Klinik Kesihatan Taman Medan- Ministry of Health) The university-NGO-public (health sector) collaboration allows multidisciplinary involvement, and together with direct youth involvement from the planning stage to execution of the programme lead to effective and sustainable interventions. The Klinik KesihatanTaman Medan acts as a focal point that connects this programme to the youths in the community. A multi-level capacity building and two-way transfer of knowledge and skills is made
possible with this collaboration. As a whole this programme is planned for the short-term outcomes to the stakeholders that include increasing awareness regarding GBV and unplanned pregnancy. This is done through the following areas; 1) increasing youth awareness of interpersonal violence (dating violence and domestic violence) by “understanding healthy and unhealthy relationship; 2) empowering youth in preventing GBV through Peer Education; 3) improving services for adolescent and young adult in the community clinic by identifying high risk adolescent, by being a focal point of support for youth reproductive health, and providing counselling and efficient referral to relevant resources. It is believed that connecting youth to the local health services could create sustainable strategies that may lead to long-term outcome.
Utilization Patterns Of The National Health Insurance In Rsud Kota Tangerang Selatan 2014 (Qualitative Descriptive Study: Evaluation Of The Implementation National Health Insurance)

Riastuti Kusumawardani  
Riastuti Kusumawardani  
UIN Syarif Hidayatullah Jakarta  
Indonesia  
riastutikw@gmail.com

The National Health Insurance policy has the purpose of providing guarantees in the form of health protection for participants to obtain health care benefits and protection to meet basic health needs who have paid contributions or whose contributions are paid by the government. Health insurance is one of the factors that affect the increased utilization of health services. (2) Since the launch of the National Health Insurance program the number of patients in RSUD kota Tangerang Selatan reached 300 patients per day (previously approximately 150 patients per day). From the above explanation, the implementation National Health Insurance also needs to be seen, given the earlier assurance program encountered several problems in each region is different because of the different characteristics of the area, both geographically and administratively. Increasing the number of patients at the hospital also increased significantly. From several studies many factors that influence the utilization of health insurance. Given the purpose of the research is the National Health Insurance Utilization Patterns in RSUD Kota Tangerang Selatan in 2014.

To describe Utilization patterns of the National Health Insurance in RSUD kota Tangerang Selatan 2014

The method done in this study is qualitative with case study design. The focus of this study is National Health Insurance participants who use health services in RSUD. The Unit of analysis is National Health Insurance implementation by using indicators National Health Insurance on hospital utilization in RSUD based model of Andersen (1974), which consists of four components, namely: social determinan, yankes , determinant of individual and utilization of health services hospitals. Sources of data are the primary data (interview, observation) and secondary data (document review).

social determinants; norms / values of the patient's hospital services free of charge for participants National Health Insurance and convenience facilities, infrastructure is driving hospitals to utilize health services. Health Services: tiered services and health personnel were informative provide positive impetus for patients BPJS hospitals to take advantage of the service. Determinants of individuals: age above 40 years, female, elementary education, merchants, need care due to illness with a diagnosis by a doctor at the health center and want a speedy recovery as well as in patients PBI is more encouraging patients to take advantage of RSUD. Use patterns are formed because of the encouragement needs of individual determinants with ease the cost to obtain hospital services and positive encouragement of norms / values of the free health care
Visual Acuity Status Of Military Pilots In Equator Region

Dr Mohd Farid bin Alias  
Dr Mohd Farid Alias; A/P Dr Victor Hoe Chee Wai; A/P Dr Mas Ayu Said; Dr Zahari Jusoh; Dr Mohammad Haizar Harun  
University of Malaya, Malaysia  
Malaysia  
dr_faridhukm@yahoo.com.sg

Pilot is categorised, as an occupation with specific needs and among the specific needs is to acquire good vision. Therefore, visual acuity measurement has been the standard mainstay of pre-entry and periodical examination to determine pilots visual function and fitness to fly. Requirement of visual acuity standard differs by class of pilots, organisation and countries. Highest standard of visual acuity is implemented in military aviation and not all air force organisation authorised usage of corrective spectacles or contact lenses when flying. There are evidences that numbers of military pilots with refractive errors inclined by years. This has resulted in the establishment of vision conservation program that not all air force organisations are aware of. Therefore, information on pilots visual acuity status is deem important to assist military organisation in reviewing and developing appropriate vision conservation program and operational flying vision policy which is lacking in small to medium size forces.

Numbers of pilots with visual acuity changes that were earlier reported did not represent the real problem that occurs in military aviation. Ageing factors could inflate the prevalence that would not provide the actual occupational risk for poor vision status among pilots. This study is therefore focus on determining visual acuity changes and magnitude of the changes among operational Royal Malaysian Air Force pilots below the age of 35 that have routine flying at the equator region.

Approval for study was attained from Chief of Air Force of RMAF and University of Malaya Medical Centre (UMMC) Medical Ethic Committee granted the medical ethic approval. Data from the VACAMA-Visual Acuity Changes Among Military Pilots main study were used for this study. Study was conducted at Malaysian Armed Forces Institute of Aviation Medicine (IAM), an institute certified by Malaysian Department of Civil Aviation authority.

Operational RMAF pilots personal medical records flying the fixed wing (fighter and transport) and rotor wing (helicopter) aircraft were retrospectively reviewed under the supervision of two Aviation Medicine Physicians of IAM. 2014 Annual Air Crew Medical Examination records that were done in IAM were screened for documentation of pilots visual acuity status. Vision was routinely tested in IAM using Vision Tester model 5600P S/N: SJ0617100299 from Stereo Optical Company Inc. Other data that were further extracted are their biological and demographic parameters. For this study, a change of visual acuity is defined when the documented uncorrected visual acuity is more than 6/6 according to MAF PULHEEMS and Armed Forces Medical Administration and Training Instructions (AFMATI) guidelines.

Pilots were identified based on their operational squadron number; type of aircraft flown and only those age 35 and less and free from medical diseases were included. Additional inclusion criteria are pilot should be free from any metabolic diseases and continually performing their routine flying
activities without being posted out to perform other administrative duties. Analyses were done using the SPSS (Version 20.0).

Total of 147 operational pilots were included in the study that include fighter, transport and helicopter categories. Majority of pilots are Malay. 50.3% (74) of the subjects are transport pilot. Among the group of pilots, only transport pilot have both gender with 10.9% are female.

There are total of 31 pilots with bilateral visual acuity changes and 5 pilots with unilateral right visual acuity changes. Transport pilots have the highest percentages for visual acuity changes for both eyes (Rt = 31.1%, Lt = 24.3%) than helicopter and fighter pilots.

Pilots awareness level to correct their poor vision with spectacle is high among fighter and helicopter pilot but low among transport pilot. Only 44.4% of transport pilot with poor vision wear corrected spectacles.

Transport pilot has the highest recorded magnitude for bilateral visual acuity changes (Table 3). 63.9% (23) of the pilots have visual acuity of 6/9 for right eye and 64.5% (20) for left eye. From chi-square analysis, differences between the groups of pilot were statistically not significant (χ² = 3.832, df = 2, p = 0.147).

This study found 24.5% of operational pilots age less than 35 years whom routine flying is within the equator region had vision status below the required RMAF visual acuity standard of 6/6. The prevalence is lesser compare to 41% of active duty pilots whom experiencing refractive errors within USAF with median age of 32.6 year. With respect to pilot categories, this study reported highest prevalence of visual acuity changes in transport followed by helicopter and fighter pilots. Transport pilot also recorded the highest visual acuity magnitude of > 6/24 for both eyes.

There is no agreeable time for the onset of occurrence of visual acuity changes among pilots. There are studies reported majority of onset after 40 years and 50 years of age. Elliot et al. reported age limit of 29 years for normal visual acuity in healthy eyes following Owsley and colleagues in their analyses. Author is more determine to assess the changes in visual acuity among young operational pilots following a study that reported the onset of visual acuity changes among military pilots during first 5 years after graduating from flying school.

Suggested contributors for visual acuity changes among young operational pilots are exposure towards UV radiation, and more specific to UVA and UVB. Wavelength less than 315nm were reported to be associated with significant adverse biological effect to the eyes. Other potential cause is exposures to ionising cosmic radiation that aircrew are exposed to during flying activities. Studies had found that both UV and cosmic radiation has similar effect on ocular health.

Review on current vision protection and vision conservation policy should be undertaken by the organisation to ensure damage to pilots vision can be minimised. Practical measures that should be implemented are to allow the usage of aviation appropriate UV protection sunglass during flying and non-flying activities and focusing on the designing of flying spectacle that is compatible with personal flying equipment and apparatus.
Where Do Public Health Graduates Work? (Analysis Of Tracer Study Faculty Of Public Health, Universitas Indonesia 2010-2014)

Syafiq A
Syafiq A, Fikawati S
Universitas Indonesia
Indonesia
a-syafiq@ui.ac.id

Historically, Faculty of Public Health Universitas Indonesia (FPHUI) was established in 1965 to provide advance training on public health for governments health workforce--mainly physicians, and lecturers of medical faculties. Those master graduates were usually going back to their respective government institution after the education. In 1989, FPHUI opened bachelor degree education to serve a more various user and to provide solutions to a more complex challenge of public health realm in Indonesia.

Getting information on transition to world of work, work situation, competencies, and learning evaluation

The analyzed data are sourced from Tracer Study Universitas Indonesia (TSUI), a system to track and to obtain inputs from universitys alumni two years after they graduated. TSUI has been conducted regularly since 2010 and targeted to all graduates of the intended cohort, asking questions on transition to world of work, work situation, competencies, and learning evaluation.

One of the most basic but important information is work place of graduates. The importance of mapping graduates workplace is not only related to the distribution of public health workforce, but also to education and curriculum plan as well. Workplace is categorized into three sectors, namely government, private, and self-employed. Data shows that in general, during the 2010-2014 period there were more FPHUI graduates who worked in private sector (53.1%) than in government sector (43.7%), while self-employment was constantly low (3.2%). At the departmental level, highest percentage of private sector employment was found for graduates from Occupational Health and Safety (75.1%), followed by Public Health Nutrition (68.4%), and Biostatistics (64.3%). Highest percentage of government sector employment was found for graduates from Epidemiology (62.9%), followed by Environmental Health (54.4%), and Health Administration and Policy (49.4%). Unique among other departments, graduates from Health Education and Behavioral Sciences, had the highest percentage of self-employment (13.3%), significantly higher than graduates from other departments. The results reflect a relatively balanced workplace between government and private sectors for FPHUI graduates, very low self-employment, and diversity of work destination at the departmental level.
Which Of Ten Dimensions Of Patient Safety Culture Will Associate With Positive Incident Reporting Hospital Staffs' Perception In Indonesia ?

Fase Badriah
Fase Badriah; Lany Aprili Sulistiani
Faculty of Medicine and Health Sciences, UIN Syarif Hidayatullah Jakarta
Indonesia
fase_bzm@uinjkt.ac.id

Adverse event and incident reporting system is important to support safety patient climate in health care system. However, incident reporting rate still low in many countries, including in Indonesia. It is caused by health workers perception about incident reporting system. Previous study reported that ten dimension of safety patient was associated with safety patient culture in hospital. Thus, being an important in health care setting. Nevertheless, it was limited study which examined the association of the ten dimensions between incident reporting hospital staffs perception.

The study aim is to examine the correlation between ten dimensions of safety patient culture from AHRQ’s tool questionnaire with incident reporting hospital staffs perception in Hospital.

The study was a pre-elementary research with quantitative approach, and used cross sectional study design. The data collected by Association of The Agency of Healthcare Research Quality (AHRQ) Hospital Survey questionnaire and Incident reporting system perception questionnaire. We examined of ten safety patient culture dimension and incident reporting perception from 192 hospital staffs from two hospitals in Jakarta. The data was analysis by AHRQ’s Hospital Survey Excel Tool 1.6 while bivariate analysis is conducted by correlation test used SPPS program 22 verse.

As suspected, 46.9 % health workers incident reporting perception was negative and 53.1 % health workers incident reporting perception was positive. We found that statistically significant correlation between positive incident reporting hospital staffs perception with supervisor/manager expectation and actions promotion of safety patient (p value < 0.001), communication openness (p value < 0.001), non-punitive response (p value <0.001) from management hospital, hand off and transition in hospital (0.001), organization learning (p value 0.018) and team work in unit (P value 0.044), respectively. However, statistically no significant correlation of positive incident reporting hospital staffs perception with feedback communication about error, staffing and management support for safety patient hospital and team work across unit.

Conclusion and Recommendations: Areas needs improvement in hospitals includes supervisor expectation and across promotion of safety patient, hand offs and transitions, communication openness, staffing and non-punitive response to error for improve hospital staffs positive perception. Healthcare organizations should reduce the fear of blame culture and create a climate of open communication and continuous learning. Following study it needed.
Breastfeeding is widely recognized as the optimal feeding method for infants and young children. Breastfed infants are at reduced risk of many health conditions, including gastrointestinal and respiratory tract infections, obits media, allergies, and sudden infant death syndrome. Lactation is also associated with many positive long-term health outcomes. Based on previous studies on breastfeeding in China, younger age, maternal return to work, shorter intended duration of breastfeeding and premature introduction of complementary feeds, are common factors associated with early cessation of breastfeeding. However, only limited studies have investigated the factors associated with Chinese mothers decision to formula feed. A cohort study conducted in Zhejiang Province reported that for births in the city of Hangzhou, late decision to breastfeed and infants being given a pre-lacteal feed were risk factors of formula introduction before three months of age. To the best of our knowledge, no research has examined the reasons of formula usage by mothers in China. Moreover, despite the effort of hospital staff in promoting and supporting breast feeding; there have been no studies that explore the understanding by staff why mothers choose to formula feed.

Why Do Mothers of Young Infants Choose to Formula Feed in China? This study aimed to elicit and compare mothers and hospital staff perceptions of the reasons that shaped mothers decision to formula feed. In-depth interviews with 50 mothers, and four focus group discussions with 33 hospital staff, were conducted in Hangzhou and Shenzhen in November 2014. Responses given by the mothers and hospital staff showed a number of commonalities. The perception of insufficient breast milk was cited by the majority of women (n = 37, 74%) as the reason for formula feeding. Mothers confidence in breastfeeding appears to be further reduced by maternal mothers or mothers-in-laws and confinement ladies misconceptions about infant feeding. Inadequate breastfeeding facilities and limited flexibility at their workplace was another common reason given for switching to formula feeding. A substantial proportion of mothers (n = 27, 54%) lacked an understanding of the health benefits of breastfeeding. Antenatal education on breastfeeding benefits for expectant mothers and their families is recommended. Moreover, mothers should be provided with breastfeeding support while in hospital and be encouraged to seek professional assistance to deal with breastfeeding problems after discharge. Employers should also make work environments more breastfeeding-friendly.
Male birth control methods (vasectomy) is one of several options in the use of contraceptives that is being done as an effort to reduce the rate of population growth in Indonesia. Men's participation in performing vasectomy in Indonesia is still below 5% of all contraceptive methods that is available. When compared to other Asian countries such as Pakistan, (5.2%), Bangladesh (13.9%) and Malaysia (16.8%). The number of vasectomy acceptors in Makassar City which recorded up to 2012 has increased as many as 1,344 people. However, it has not been able to increase the average National achievement number of vasectomy acceptors. The low participation of men in family planning program is due to many factors, among others, from the client side of the man himself (knowledge, attitudes and practices as well as the requirement that he wanted), environmental factors (social, cultural, community and family / wives role), limited information and Accessibility to family planning services and limited variation of male contraceptive.

This study aims to reveal the role of the wife in her husband encouragement to participate in family planning programs, especially vasectomies.

The method used in this study is qualitative method with descriptive analysis approach. There are fifteen men being interviewed in this study as an informant including their wife, each participating in family planning programs, especially vasectomies. Data were obtained through interviews and observations being analyzed inductively.

The results showed the influence of the wife toward her husband's decision to perform a vasectomy. Where the wife support gives positive influence on her husband's decision to participate in the family planning program as a participant and as a cadre. The most excellent wife attitudes toward the purpose of contraception as a form to plan the number of the children. This support is also based on the idea that vasectomy is an effective contraception method. While the attitude of wives who said that they don't support their husband to participate in the family planning program is because their lack of knowledge about men's participation in the family planning programs, especially those who were still not familiar with males contraception method, also advantages and disadvantages of vasectomy. Wifes attitude is very influential in encouraging their husbands to perform vasectomy. Wifes attitude can be either positive or negative depending on the attitude and actions of their role model. To have a positive attitude about family planning programme, wife is required to have sufficient knowledge, vice versa if they don't have enough knowledge then undergo a compliance program reduced.
AUTHOR INDEX
<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duong Van Tuyen</td>
<td>163, 168, 326</td>
</tr>
<tr>
<td>Dwi Endah</td>
<td>434</td>
</tr>
<tr>
<td>Dwi Gayatri</td>
<td>50</td>
</tr>
<tr>
<td>Dwi Linna Suswardany</td>
<td>240</td>
</tr>
<tr>
<td>Dwi Oktiana Irawati</td>
<td>461</td>
</tr>
<tr>
<td>Ede Surya Darmawan</td>
<td>241</td>
</tr>
<tr>
<td>Eka Nurhayati</td>
<td>446</td>
</tr>
<tr>
<td>Elaida Fikri</td>
<td>200</td>
</tr>
<tr>
<td>Ella Andayanie, SKM, M.Kes</td>
<td>378</td>
</tr>
<tr>
<td>Elia Nursaela Hadi</td>
<td>341</td>
</tr>
<tr>
<td>Ema Hermawati</td>
<td>139</td>
</tr>
<tr>
<td>Emma Rachmawati</td>
<td>207</td>
</tr>
<tr>
<td>Erena Fabyola Laurensia</td>
<td>589</td>
</tr>
<tr>
<td>Erlin Helinda</td>
<td>412</td>
</tr>
<tr>
<td>Erna Mutiara</td>
<td>404</td>
</tr>
<tr>
<td>Ernawaty</td>
<td>164</td>
</tr>
<tr>
<td>Eti Budiarti</td>
<td>73</td>
</tr>
<tr>
<td>Eti Rimawati</td>
<td>218</td>
</tr>
<tr>
<td>Eva Nabih binti Zamri</td>
<td>49</td>
</tr>
<tr>
<td>Evi Martha</td>
<td>29</td>
</tr>
<tr>
<td>Evi Nurhidayati</td>
<td>169</td>
</tr>
<tr>
<td>Fadhli Yusoff</td>
<td>517</td>
</tr>
<tr>
<td>Fadziah Hanum Mohd Mydin</td>
<td>599</td>
</tr>
<tr>
<td>Fahriini Yulidasari</td>
<td>530</td>
</tr>
<tr>
<td>Farous Prihatin Idris</td>
<td>151, 456</td>
</tr>
<tr>
<td>Fajaria Nurcandra</td>
<td>546</td>
</tr>
<tr>
<td>Fangfang Cui</td>
<td>340</td>
</tr>
<tr>
<td>Fang-Yuan Sheu</td>
<td>150, 579</td>
</tr>
<tr>
<td>Farapti</td>
<td>374</td>
</tr>
<tr>
<td>Fariani Syahrul</td>
<td>587</td>
</tr>
<tr>
<td>Fase Badriah</td>
<td>366, 633</td>
</tr>
<tr>
<td>Fatma Lestari</td>
<td>264</td>
</tr>
<tr>
<td>Fatmah Afrianti Gobel</td>
<td>595</td>
</tr>
<tr>
<td>Fauziah Elytha</td>
<td>547</td>
</tr>
<tr>
<td>Fauzie Rahmam</td>
<td>495, 520, 606</td>
</tr>
<tr>
<td>Febrina Elisabeth</td>
<td>128</td>
</tr>
<tr>
<td>Fenny Etrauwati</td>
<td>221</td>
</tr>
<tr>
<td>Fikawati S</td>
<td>205, 497</td>
</tr>
<tr>
<td>Firdausi Ramadhan</td>
<td>605</td>
</tr>
<tr>
<td>Firman Suryadi Rahman</td>
<td>440</td>
</tr>
<tr>
<td>Fitria</td>
<td>124, 569, 608</td>
</tr>
<tr>
<td>Greta Chun-Huen Tam</td>
<td>319</td>
</tr>
<tr>
<td>Greta Tam</td>
<td>206</td>
</tr>
<tr>
<td>Gunawan Widjaja</td>
<td>506</td>
</tr>
<tr>
<td>H</td>
<td>94</td>
</tr>
<tr>
<td>Hadi Pratomo</td>
<td>18</td>
</tr>
<tr>
<td>Hadi Pratomo*</td>
<td>78</td>
</tr>
<tr>
<td>Haeranah Ahmad</td>
<td>388</td>
</tr>
<tr>
<td>Hafifatul Aulia Rahmy</td>
<td>88</td>
</tr>
<tr>
<td>Hanum Atikasari</td>
<td>331</td>
</tr>
<tr>
<td>Hasanuddin Ishak</td>
<td>503</td>
</tr>
<tr>
<td>Hasirun</td>
<td>111</td>
</tr>
<tr>
<td>Hazreen AM</td>
<td>596</td>
</tr>
<tr>
<td>Helda</td>
<td>131</td>
</tr>
<tr>
<td>Helman Alfonso</td>
<td>104, 583</td>
</tr>
<tr>
<td>Helwiah Umniyati</td>
<td>323</td>
</tr>
<tr>
<td>Hendra Dhermawan Sitanggang</td>
<td>120</td>
</tr>
<tr>
<td>Hendra Tanjung</td>
<td>35</td>
</tr>
<tr>
<td>Hendri Hartati</td>
<td>247</td>
</tr>
<tr>
<td>Herawanto</td>
<td>511</td>
</tr>
<tr>
<td>Heribertus Rinto Wibowo</td>
<td>27</td>
</tr>
<tr>
<td>Hoe Victor CW</td>
<td>122, 130</td>
</tr>
<tr>
<td>Hoirun Nisa</td>
<td>259</td>
</tr>
<tr>
<td>I</td>
<td>122, 130</td>
</tr>
<tr>
<td>I Made Djaja</td>
<td>607</td>
</tr>
<tr>
<td>Iawati Trisno</td>
<td>351</td>
</tr>
<tr>
<td>Ignata Lusmiling Latiang</td>
<td>187</td>
</tr>
<tr>
<td>Ike Anggraeni</td>
<td>269</td>
</tr>
<tr>
<td>Ikes Dwastuti</td>
<td>337</td>
</tr>
<tr>
<td>Ikuharu Morioka</td>
<td>426</td>
</tr>
<tr>
<td>Indri Hapsari Suslowati</td>
<td>149</td>
</tr>
<tr>
<td>Inne Soesanti</td>
<td>185</td>
</tr>
<tr>
<td>Intan Siliviana Mustikawati</td>
<td>132</td>
</tr>
<tr>
<td>Ira Wijnpadiputo</td>
<td>525</td>
</tr>
<tr>
<td>Irahafiza Jamil</td>
<td>180</td>
</tr>
<tr>
<td>Irma Prasetyowati</td>
<td>89, 237</td>
</tr>
<tr>
<td>Isanka A. Talagola</td>
<td>167</td>
</tr>
<tr>
<td>Isnatami Nurul Azni</td>
<td>498</td>
</tr>
<tr>
<td>Isti'anah Surury</td>
<td>302</td>
</tr>
<tr>
<td>Iting Shofwati</td>
<td>423</td>
</tr>
<tr>
<td>Ivan Elisabeth Purba</td>
<td>194</td>
</tr>
<tr>
<td>Iwan Ariawan</td>
<td>252</td>
</tr>
<tr>
<td>J</td>
<td>475</td>
</tr>
<tr>
<td>J P Silva</td>
<td>315</td>
</tr>
<tr>
<td>Jenny Rotua Batubara</td>
<td>308</td>
</tr>
<tr>
<td>Jennex Padmaka Silva</td>
<td>20</td>
</tr>
<tr>
<td>John Th. Ire</td>
<td>352</td>
</tr>
<tr>
<td>Jong Soo Ryu</td>
<td>111</td>
</tr>
</tbody>
</table>
K

KA Malek ................................................................. 392
Kamal Singh ......................................................... 86
Kamaluddin Latief .................................................. 231
Koteakaew Seangprow ........................................... 289
Katsuko Suenaga ................................................... 435
Kazuko Yamada ..................................................... 500
Ke Zhang .............................................................. 634
Keitaro Sakaki ....................................................... 370
Kelvin Wai Kit Ling ................................................ 281
Kholis Ernowati ...................................................... 280, 557, 559
Kinanthi Estu Linadi ............................................... 555
Kunihiro Miyamoto ................................................... 537
Kurnia D Artanti ....................................................... 509
Kurnia Sari ............................................................. 184
Kusmiyati ............................................................... 516

L

L Meily Kurniawidjaja .............................................. 162
Laila Fitria .............................................................. 53
Lailatul Muniroh ..................................................... 592
Lassie Fitria ............................................................. 239
Lauro Arciniegas MA ............................................... 301
Lee Jing Kun .......................................................... 343
Lijun Wang ............................................................. 136
Lilis Heri Mis Cicih ................................................... 108
Linda Suwarni ........................................................ 229
Liqian Qiu ............................................................... 71
Lisa Novianti .......................................................... 448, 598
Lucia Yovita Hendrati .............................................. 170
Lucky R. Alma ......................................................... 527, 531, 578
Lulu Octaviani ........................................................ 372
lusyta puri ardihiyanti ............................................ 618

M

Mahesh Appannan .................................................... 419
Mahirah Binti Ma’som ............................................ 57
Maki Murakawa ....................................................... 362
Mani Wakabayashi ................................................... 224
Manuj Weerasinghe ............................................... 228
marditi nadji .......................................................... 543
Mardiati nadji .......................................................... 349
Mark King ............................................................... 67
Martya Rahmaniati .................................................. 297, 613
Mas Ayu Said ........................................................... 576
Masyitha Muis .......................................................... 126
Masyithah ................................................................. 172
May Chan Oo ........................................................... 416
Mayamol Pradeep ..................................................... 367
Maznah Dahlui .......................................................... 447
Meijun Chen ........................................................... 295
Meliana Sari ............................................................ 178
Merlyn Sinaga ............................................................. 405, 444
Meshal ALRashdi ....................................................... 56
Mila Tejamaya ............................................................ 310
Milla Herdayati ........................................................ 127
Ming-Shu Chen .......................................................... 532
Mohammed Aliulifi .................................................... 449
Mohd Azahadi Omar .................................................. 565
Mohd Izhar Ariff ....................................................... 147
Monalisa ................................................................. 431
Monastri K Sudaryo .................................................. 90
Monastri Korib Sudaryo .......................................... 499
Motoyuki Yuasa ....................................................... 364
Muhammad Hazizi Muhammad Hasani ....................... 96
Muhammad Atoillah Isfandiari .................................... 588
Muhammad Taufiq ..................................................... 420
Muji Sulistyowati ....................................................... 585
Muniandry Narasiman ............................................... 198
Murhaban ............................................................... 626
Musdalifah .............................................................. 582
Mustakim ............................................................... 529
Myint Myint Soe *, Sandeep Sugathan *, Sabaridah Ismail* & Osman Ali* ........................................ 14

N

Nadja Khafia .............................................................. 316
Nadia Mohd Mustafah .............................................. 472, 514
Nasrin Aghamohammadi .......................................... 91
Nasrin Kodim ............................................................ 181
Nik Daliana Nik Farid ............................................... 561
Nikmah Utami Dewi ................................................. 455
Nina Herlina ............................................................. 480
Nisa Kamila, SE ....................................................... 473
Nithia Thangiah ........................................................ 296
Noorce Christiani Berek ......................................... 621
Noppapan Nankongnb ............................................. 476
Norainna Ab Rahim .................................................. 428
Noran N Hairi, Choo Wan Yuen, Sajaratulnisah Othman, Farizah Mohd Hairi ........................................ 17
Norfazilah A .............................................................. 26
Norhasila Abu Bakar ............................................... 261
Nova Mohani ........................................................... 562
Novia Gita Suriantina ............................................... 602
Nur Aini Hidayah ....................................................... 522
Nur Aini Kusmayanti .................................................. 502
Nur Ani ................................................................. 432
Nur Laily ................................................................. 427
Nurhayati Prihartono .................................................. 183
Nurhuda Ismail ........................................................ 117
Nurmala Sely Saputri .................................................. 604
Nursuhaili Mohd Amin ............................................. 179
Nurvita Wikansari ...................................................... 377
Nuryati ................................................................. 526
Nuzulul Kusuma Putri ................................................ 376, 383, 408, 603, 624
Run-tang Meng .................................................. 333
Ryan Rachmad Nugraha ...................................... 409

S
Sabaridah Ismail3, Bharathalingam Sinniah4, Myint
Myint Soe* and Osman Ali* .................................. 16
Sabarinah Prasetyo ............................................ 174, 387
Sabarinah Prasetyo5,6, Dadun7, Fitra Yelda7, Riza L
Asmarani8, Husein Habsi9, Laksmi PD Silvana9) ...... 22
Sobina Wagle .................................................... 153
Sajaratulnisa Othman ........................................... 627
Sajeev S. ............................................................ 303
Salsabila Benazir, SKM ........................................ 47
Samantha C Vijewardana ...................................... 223
Sandheep Sugathan ............................................. 63
Santha Muller ...................................................... 33
Sarah Handayani ................................................ 551
Sarina Pangaribuan ............................................. 424
Saw Ohn Mar ....................................................... 77
Septyanie Choirunisa .......................................... 70, 564
Serlie K.A Littik .................................................. 556
Chan-Chi Pai ...................................................... 470
Sharon Gondodiputro ........................................... 566
Sharyn Burns ....................................................... 175
Shige Kakinohana ................................................ 570
Shreenika De Silva Weliange .................................. 238
Shrimarti Rukmini devy ....................................... 612
Shrimarti Rukmini Devy ........................................ 260
Shugo Sakihama .................................................. 590
Si Woo Kim ........................................................ 21
Sifa Fauzia .......................................................... 298
Silva J P .............................................................. 335
Siti Masfiah .......................................................... 474
Siti R Nadihiro ...................................................... 463
Sitti Patimah ......................................................... 542
Sjahruil Meizar Nasri .......................................... 342
Sobar ................................................................. 523
Soenarnatalina Melaniani ..................................... 488
Solha Elrifda ....................................................... 203
Sondang Sidabutar, SKM, M.Kes ........................... 44
Sresumatchai, V. .................................................. 572
Sri Adningsih ...................................................... 282, 411
Sri Sumarmi ........................................................ 414, 567
Sri Yusnita Irda Sari ............................................. 299
Sriyanti Wijayanti .................................................. 454
Suda Hanklang ...................................................... 581
Sudijanto Kamso .................................................. 251
Suketaka Iwanaga ............................................... 380
Sumiaty, SKM, M.Kes ......................................... 539
Suprijanto Rijadi MD,PhD .................................... 98
Suthep Silapanuntakul ......................................... 577
Suyud Warso Utomo ............................................ 191, 441
Syafiq A ............................................................ 189, 437, 515, 575, 632
Syarifah Aqilah ..................................................... 533
Wei Jie Tee
Warnasekara Y.P.J.N
Wanti
Wahyu Kurnia Y Putra
Wahyu A. Tias
Wa Ode Dwi Daningrat
Vindya Kumarapeli
Vajanapoom Nitaya
Wa Ode Dwi Daningrat
Wahyu A. Tias
Wahyu Kurnia Y Putra
Wani
A
Wa Ode Dwi Daningrat

Y
Yut
Yusriani
Yusof Suboh
Yussriani
Yut-Lin Woon
Zhao Kang Yuan
Zulhaidea Lubis
Zulkifli Djunaidi

X
Xin Li
Xintong Li

U
Uma Langkulsen

V
Vajjanapoom Nitaya
Vetty Yulianty Permanasari
Vina Yulia Anhar
Vindya Kumarapeli

W
Wa Ode Dwi Daningrat
Wahyu A. Tias
Wahyu Kurnia Y Putra
Wanti
Waqar Al-Kubaisy
Warnasekara Y.P.J.N
Wei Jie Tee
Widya Fadila
Widyawati Sumadio
William B Goggins
Wulan Meilani

Yasuhiko Nohara
Yasuko Koja
Yayun Xu
Yeni Mahwati
Yenny Moviana, MND
Yenny Puspitasari
Ying Wang
Yohan Lee
Yoshihisa Watanabe
Young-hoon Gong
Yueqiao Wang
Yueting Kew
Yu-Feng Wu
Yukako Kaneshiro
Yukako Komasa
Yuli Butu
Yulia Sari
Yuly Sulistyorini
Yusniar Hanani Darundlati
Yusof Suboh
Yussriani
Yut-Lin Woon
Acknowledgement

The Committee would like to acknowledge with gratitude to the following sponsor for their enormous contribution and continues support to the success of The 47th Asia Pacific Academic Consortium on Public Health Conference

Sponsor

MINISTRY OF HEALTH REPUBLIC OF INDONESIA

BPJS Kesehatan
Badan Penyelenggara Jaminan Sosial

KOMISI PENANGGULANGAN AIDS

SC Johnson
A Family Company

Kesmas
Kementerian Kesehatan Republik Indonesia

Makara

BNI

Curtin University

Co-Organizer

PT. INDOMINA

PT. INDOMINA

PT. INDOMINA

PT. INDOMINA

PT. INDOMINA
PUBLIC HEALTH CHALLENGE IN THE ASIA PACIFIC REGION: BUILDING REGIONAL INITIATIVES FROM LOCAL EXPERIENCES AND BEST PRACTICES