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Keynote Speech ~~~~~~~~~~~~~~~~~~~~ Yasuhide Nakamura

Symposium “Private Enterprise and the New SDGs”
…Yukoh Satake, Yuzo Nakao, Takayuki Hotta, Kanetoshi Oda

Oral presentation

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KAYAKO SAKISAKA
Keynote Speech

International Health Towards Leaving No One Behind

Yasuhide Nakamura

Graduate School of Human Sciences, Osaka University

International Health was defined in the textbook as a discipline of academic and practical researches to identify the gap of health status and health services between countries and areas, to discuss the factors related to the unacceptable gap, and to develop the tools to reduce the gap (Shimao 2001).

The 70th UN conference on “Transforming our world: the 2030 Agenda for The Sustainable Development Goals (SDGs)” stressed on the idea of leaving no one behind. Many programs have started actions for social inclusion of persons with disabilities, refugees, migrants, ethnic minorities and the poor, as well as pregnant mothers, babies, children and elderly.

I would like to consider the roles of private hospitals or private companies. The investment for health has been discussed among many big private companies. However, the advantages and disadvantages should be evaluated from the perspectives of patients and people in target countries as health care users. Personally, I hope more Japanese companies to participate in the global health fields, for examples, with the spirit of “Triple Win” of management philosophy of old Ohmi-merchant.
Symposium

Private Enterprise and the New SDGs

“Mung Bean (Cultivation in Bangladesh (SDG1))”
Yukoh Satake

“Supplemental Nutrition Development in Africa (SDG2)”
Yuzo Nakao

“Selling Solar Lanterns in Kenya (SDG7)”
Takayuki Hotta

“The Business of Water Purification (SDG6)”
Kanetoshi Oda

1Euglena Co., Ltd.
2Ajinomoto Co., Inc.
3Panasonic Corporation.
4Nippon Poly-Glu Co., Ltd.

The 17 Sustainable Development Goals (SDGs) and 169 targets set at the 2015 UN Summit address concerns left unresolved by the previous Millennium Development Goals such as poverty and public health, while seeking to tackle problems of mounting urgency including the environmental crisis and the inequality gap. Transcending national boundaries and affecting civilization on a global scale, these challenges called for a worldwide response. It was out of the realization that no one country could solve the challenges that the SDGs were born. Achieving such far-reaching goals requires not only a comprehensive “big picture” view but also technological innovation and formation of partnerships among stakeholders at all levels across the world including government, private enterprise, university/research institutions, local authorities, and the general public.

Before the adoption of the SDGs by the UN, however, many Japanese corporations had already been addressing many issues - clean water, poverty, malnutrition, renewable energy sources, etc. - from a business standpoint. Regardless of standpoint, if the efforts result in positive local outcomes then they become a win-win, often leading to the discovery of fresh ideas to address health in developing countries. And if corporations are contributing to the achievement of SDGs, then they should be considered players in the realm of international health.

At this year’s conference we will have a chance to hear directly from a number of such corporations actively involved in issues raised by the SDGs and learn about their business models, results, and experiences they have gained along the way.
Oral Presentations

O-01-01 Nutrition survey on Brazilian school children in Japan

YUKA KATO1, TAEKO HAMAI2, SATOKO ISHIDA3, AYA OTAKA4

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2School of Nursing, University of Shizuoka, Shizuoka, Japan,
3Seirei Health Care Division, Hamamatsu, Japan,
4Nippon Medical School Musashi Kosugi Hospital, Kanagawa, Japan

Background

Brazilian children in Japan risk nutritive bias because their parents impact their food habits. The purpose of this study is to investigate nutritive state of Brazilian school children in Japan.

Methods

In 2014, we collected data by self-administered 3-day food record and photo record method from 15 Brazilian school children ages 10-14 in Shizuoka. We analyzed physical status, eating habits and nutritive state of 13 children. The IRB of the University of Shizuoka approved the study protocol.

Results

Subjects were 3 boys and 4 girls ages 10-11, and 3 boys and 3 girls ages 12-14. Obesity ranged from 13.8% to 42.7%; 5 children had childhood obesity. Energy intake ranged from 43.5% to 108.2% of requirement; 2 children were undernourished. Children aged 12-14 often skipped breakfast. They snacked between meals a maximum 2-3 times. Breakfast energy intake was minimal; the median for snacks between meals was much higher. Energy intake was below tolerable upper Japanese and USA levels as follows; protein, dietary fiber, potassium, calcium, phosphorus, iron, copper, manganese, vitamins A, B1, B2, B6, C, and K, folic and pantothenic acids. However, sodium chloride equivalent and fat energy rate exceeded recommendations. Boys and girls age 12-14 were short on minerals, and girls age 12-14 on vitamins. Their meats and seasonings were much higher than Japanese goals, with potatoes, seeds, vegetables, and seaweed lower.

Conclusion

In this study, 5 among 13 Brazilian children had childhood obesity. Mealtimes varied, with habits of skipping breakfast and snacking between meals. They intake insufficient vitamins and minerals, but excessive saturated fat and animal proteins.

O-01-02 Expected ability for globalization in the field of food and nutrition in Japan

YUKA SAITO, KAORI MIZUMOTO

Department of Dietary and Health, International College of Arts and Sciences

【Purpose】Demands of communication ability has been increased in globalized society. This study aimed to clarify current situation and expected ability for globalization in the field of food and nutrition in Japan.

【Methods】Semi-structured interviews were carried out to the people in the food industry and nutrition care management in Japan. The interview guide was developed by reference to the framework of cultural competency. All the interviews were recorded and transcribed. Segmented text data was coded and annualized based on the thematic analysis according to the framework used for the interview guide.

【Results】We interviewed 10 people from 7 facilities. New categories of cultural competency emerged such as “experience” and “support”. “Experience” was regarded as an internal factor included exposure to different culture. “Support” was regarded as external factor included organizational backup for globalization. Administrative management ability and also sufficient time, budget and translator at workplaces were strong factors for the people working with and for non-Japanese people. Many subject emphasized “sensitivity” such as sympathy with different culture as an important factor. It was also observed that required communication ability was not merely linguistic ability but also ability of understanding and getting understood.

【Conclusion】Expected abilities for globalization in the field of food and nutrition were “sensitivity”
based on “experience”. Furthermore, “communication” was an important factor to convey technical knowledge of nutrition with understandable expressions and to build a trusted relationship. Expected abilities for globalization were also abilities required in domestic.

O-01-03 The carrier formation of faculty members who teach international nursing at university

Haruka Yokota¹, Akiko Kondo²

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²Graduate School of Health Care Sciences Tokyo Medical and Dental University

Background: As the global health disparities are getting serious, the needs of the international nursing science are increasing. The purpose of this study is to clarify the carrier formation of the faculty members who teach international nursing. Result from this study can be expected for students to image international nursing and be useful for seeking for their career pathway.

Methods: This is an internet survey, which was conducted in September, 2015. Participants’ inclusion criteria were the faculty members who teach international nursing at a university. A self-administered internet questionnaire via the Survey Monkey, which included selection formula and free description was used. Free description was analyzed using content analysis. This study was approved by the Institutional Review Board of the university. Results: Response rate of the questionnaire was 51.2% (n=31). More than 80% of them had overseas experience other than obtaining degree. Activities participants experienced overseas included educational activities, investigation / study, and project. Many participants reported, [Able to convey to students the differences in culture and values or global perspective, etc.] and [Able to introduce in the lecture specific cases through experience] as how they used oversea experience for their lectures.

Conclusion: Overseas experiences were used for expanding the lectures that were based on the difference between foreign countries and Japan and on the specific cases, and for providing the fields of learning for students. It is important to have any experience abroad in order to gain wide view.

O-01-04 The prospect of educational program in International Health and Nursing at national nursing colleges in Japan

AKINA ISHIBASHI, Sae Tanaka, Hitomi Matunaga, Koichi Shinchi

Devision of International Health and Nursing, Faculty of medicine, Saga University, Saga, Japan.

[Background] In expanding globalization, International Health and Nursing (IHN) is gaining more attention. This study aims to clarify the current educational state and issues in IHN at national nursing colleges in Japan.

[Methods] We distributed self-administered questionnaires by mail targeting professors in charge of IHN in 41 national nursing colleges. The questions were: 1. How many hours (or credits) of IHN do you teach? Is the subject compulsory or elective? 2. Who is teaching IHN? 3. What is the high priority educational contents in IHN? The data collection period was between July 1 and 31, 2016. (This abstract is based on data obtained through July 15.) This study was approved by the Ethics Committee of Faculty of Medicine, Saga University.

[Results] We received responses from 20 colleges. IHN was taught as a specialized subject at 80% of them. IHN was compulsory at 50% of the 80%. IHN was taught by fulltime nursing staff at 60% of them. Answers often encountered about the current educational issues were: Careful selection of educational contents focused on international perspectives, Understanding cultural differences through international exchange, and Improving practical skills by simulating training.

[Conclusion] At about 80% of colleges, IHN was taught as a specialized subject. It was compulsory at
only 50%, however. Whether or not students can acquire knowledge in IHN depends on the educational system offered at students chosen to attend. To put IHN in a more focused part of nursing curriculum, it is necessary to establish a program that students are exposed to international perspectives through practical training.

O-01-05 Our activity about Basic Life Support (BLS) seminar in Cambodia

TAKEHIRO KOZUMA, Yoshifumi Hayashi, Yuri Kang, Chhay Hong

Sunrise Japan Hospital Phnom Penh, Cambodia

<Introduction>
Because of the aftermath of the civil war in 1970s, the healthcare system in Cambodia is not matured enough as well as the education for healthcare staff. Few people know about Basic Life Support (BLS), or Automated External Defibrillator (AED). Since we are planning to open an emergency center at Phnom Penh in Cambodia in September 2016 as an outbound project of Japanese healthcare service supported by both public and private sector, we held BLS seminar for both healthcare staff and citizens as an activity of our emergency department.

<outline>
We held BLS seminar by 2 Japanese and 14 Cambodian medical staffs. We did hands-on seminar 12 times from March to July in 2016 conformed to AHA guideline 2015 by using medical mannequins and AED trainers. We prepared slide, movie, documents in Khmer which is local language in Cambodia and total 306 participants attended. First 8 times Japanese staffs explained in English and Cambodian staffs translated into Khmer. Last 4 times Cambodian staffs explained in Khmer.

<Discussion>
Because BLS is essential for saving patients without using special machines or medicine, the seminar seems to be effective for resource-limited situation like Cambodia. One of the key factor of success for this seminar would be education for local instructors and we found they could master the method of training if we had taught them in enough time with a passion.

<Conclusion>
Holding a BLS seminar in a developing country by the local language seemed to be effective to contribute to the local healthcare education.

O-02-01 A multi-sector health promotion and community changes in Papua New Guinea

Nahoko Harada¹, Narimitsu Sasaki²

¹Department of Nursing Science of Community Health Care System Division of Health Sciences Graduate School of Medicine Tohoku University, Sendai, Japan,
²Kansai University of Welfare Sciences

During the Pacific Partnership 2015, the joint team consisted with the Japan Self Defense Force, a Japanese NGO, the Japan International Corporation Agency, and the United States Marines conducted a sustainable health promotion event in Karamanugan, Papua New Guinea (PNG). This presentation aims to report the strategy and its subsequent changes in PNG communities. The JSDF and NPO team built a project plan based on the Sphere Standard, an international standard for humanitarian aid work and the overseas volunteers of JICA acted as a critical informant to make the plan more culturally sensitive and sustainable. The one-day event was designed to maximize its effects through participatory activities. Participants learned and tried an activity sequence with hand wash, nutrients rich cooking, teeth blushing, and exercise. Over one hundred community residents participated the event. The JSDF and NPO team was unable to evaluate the effects of the event, the JICA volunteers observed for six months instead. There were four changes in the community 1) vegetable rich Japanese pancakes was localized, 2) reduced female housekeeping time, 3) sub-income by selling the pancakes, and 4) similar
O-02-02 Can types of residence after the Great East Japan Earthquake predict the incidence of depressive symptoms? The Iwanuma project, The JAGES prospective cohort study

YURI SASAKI1, JUN AIDA2, YASUHIRO MIYAGUNI1, TAISHI TSUJI1, YUIKO NAGAMINE1,3, YUKAKO TANI4,5, TAMISAITO6, KAZUHIRO KAKIMOTO2, KATUNORI KONDO1,6

1Center for Preventive Medical Sciences, Chiba University, 2Tohoku University Graduate School of Dentistry, 3University College London, 4Tokyo Medical and Dental University, 5Japan Society for the Promotion of Science, 6National Center for Geriatrics and Gerontology, 7Kansai International Airport Quarantine Station, Ministry of Health, Labour and Welfare

Introduction

Few studies elucidated mental health of survivors after natural disasters with considering for pre-disaster information despite of the global increase trend of disasters. We investigated the association of pre-disaster characteristics and types of residence after the Great East Japan Earthquake which destroyed housing of coastal residents on the emergence of depression after the disaster.

Method

This panel study, designed as a natural experiment, was comprised of a cohort of subjects aged 65 years or older in Iwanuma, Miyagi, performed in 2010 and 2013 as a part of the Japan Gerontological Evaluation Study (JAGES). The Geriatric Depression Scale (GDS-15) was used with a cut-off value of score five. Types of residence after the disaster were divided into five categories (1. no moving; 2. temporary housing; 3. minashi-kasetsu, housing rented by the survivors but paid by the government; 4. new housing; 5. other). Poisson regression analysis was adopted.

Results

Among 2242 subjects included in this analysis, 16.2% newly reported depression in 2013. After adjusting for socio-demographics, baseline GDS score, self-rated health, housing damage, loss of relatives or friends, the adjusted rate ratio (ARR) for the onset of depression for subjects living in temporary housing (n=42) compared with those who did not move (n=2084) was 1.77 [95% confidence interval (CI): 1.01-3.12], while minashi-kasetsu (n=19) was not statistically significant (ARR: 1.09, 95% CI: 0.43-2.76).

Conclusion

Survivors in temporary housing increased the risk for depression. Mental health care to the survivors in temporary housing is needed.
O-02-03 Monitoring for Ensured Communicable Disease Control on Evacuation Sites in Nepal

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The earthquake that hit Nepal in April 2015 became an opportunity for the disaster nursing community to take action and test use of ICT in collecting and managing victims in evacuation centers. The study used an exploratory, descriptive study and discuss for policy for revitalization. The items in this study include living environment assessment and items from the Surveillance in Post Extreme Emergencies and Disasters (SPEED), which was conceptualized by WHO/WPRO to provide real time health information reporting after a disaster developed, and the post-disaster Early Warning Alert and Response Network (EWARN).

The EpiNurse center was launched at Nursing Association in Nepal to help improve the accuracy of data collection by nurses. EpiNurses carry a tool kit to conduct monitoring. The toolkit consists of simple software with paper and smartphone application, and it is in layman’s terms for Nepali nurses who are main users. Monitoring was conducted by trained local nurses using the toolkit in Kathmandu for 4 months at 24 Camps in 9 affected districts, using telephone or smartphone apps. The characteristics of EpiNurses is 41 years old on average, have 2-33 years experience of nursing.

If it is unavailable of IT infrastructure, it takes more time to update the data. In this research, 8 EpiNurses did not have smartphones and no electricity and telephone after disaster in some area. Only GPS on picture in smartphone enable to identify the shelter.

This research bring about sustained community healent. Meanwhile, this study shows the needs for local stakeholder to take urgent steps to make available information more intelligible and co-evolve with environmental changes related to human capacity and status.

O-02-04 ART adherence, treatment failure and mental health among earthquake victims living with HIV in Nepal.

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A 7.8 magnitude-devastating earthquake in April 2015 resulted in 8,600 deaths, 21,900 major injuries, and 88,000 displacement of people. Around 1000 of health service facilities were damaged, of them 402 were completely destroyed. In such situation, HIV/AIDS can invite risk drug resistance, as at least 95% medical adherence is required to prevent drug resistance and treatment failure. This study aimed to assess adherence to antiretroviral therapy (ART), risk of drug resistance or treatment failure, posttraumatic stress disorder, HIV stigma and risky sexual behavior among PLHIVs in earthquake affected area in Nepal. After 6 months of earthquake, 305 PLHIVs based on health centers in whole earthquake-affected area, were interviewed. From face-to-face interviews we collected information regarding ART drug adherence (last 4-day pill count), posttraumatic stress disorder (PTSD), earthquake damage and loss, access to medical services, social support, stigma and discrimination, and risky sexual behavior. Logistic regression analysis was applied to measure associations. Around 13% participants
reported treatment failure while only 8% were not more than 95%-adherent to ART. Moreover, 44% of the participant had PTSD symptoms, and 49.8% reported being stigmatized. Five percent of participants lost their family member during the earthquake. Interestingly, ART adherence was not found statistically associated with PTSD, stigma, and social support, however it was associated with disclosure of sero-positive status. Similarly, treatment failure was associated with caste and religion. In resource-limit and underdeveloped countries overcoming social problems such as stigma and discrimination toward PLHIVs and caste-system may improve treatment failure and possible drug resistance.

\[ \text{O-02-05 Possibility of future oversea disaster assistance.} \]
\[ \text{~Report of Humanitarian Medical Assistance (HuMA) support for Kumamoto earthquake~} \]

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Humanitarian Medical Assistance (HuMA) Certified NPO Organization

(Introduction)
Kumamoto earthquake happened in April 2016. HuMA has sent Disaster assisted team for that earthquake for 22nd April to 26th May. That team provided support mainly in Aso city. (Summary)
The activities are under the direction of Aso Disaster Recovery Organization (ADRO) was organized in Aso region to support public health nurses in this region and assess medical need. One of problem is the lack of communication in between local satellite shelters, The public health nurses from another prefecture were assessing those local satellite shelters at that time, however local public health nurses cannot to oversee and manage whole city, because those public nurses are also staying in the local shelters. So we have launched headquarter to support those public health nurses. One of our main projects was information sharing with related teams in the scene. We also draw up some issues to the central organization to adjust.

(Discussion and Conclusion)
WHO will classify the Emergency Medical Team (EMT) according to their activities in the international large-scale disaster. Our experience in the Kumamoto earthquake will give us useful lessons for future missions because the importance of logistic works increasing in these days. And this experience gave us another choice for our disaster supports which is supporting for operation.

\[ \text{O-03-01 Evaluating Intervention Implementation Using RE-AIM Framework: Effectiveness of Ghana EMBRACE Implementation Research} \]

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Background: Globally, interventions have been conducted to overcome public health challenges. However, most did not succeed in the real world as their implementation aspect has been overlooked. The Ghana EMBRACE Implementation Research Project developed a rare maternal and child health intervention that considered both the intervention and implementation aspects. Its aim was to improve mothers’ and babies’ access to care in Ghana by providing the continuum of care card and postnatal care within 48
hours postpartum intensively. This study evaluated especially the implementation aspect of the Ghana EMBRACE intervention following five dimensions of the RE-AIM framework: reach, effectiveness, adoption, implementation consistency, maintenance of intervention effects. Methods: To evaluate the implementation, we used the questionnaire survey data of 870 mothers who gave birth during the one-year intervention period. Additionally, we conducted 12 key-informant interviews with health workers. We analyzed data using the RE-AIM framework. Results: The intervention reached 78% of the targeted mothers and was effective for improving their access to postnatal care within 48 hours; from 25% to 82%. The intervention was highly adopted; 88% of mothers responded their willingness to use the continuum of care card. According to the health workers, the intervention was consistently implemented, however, some reported challenge in maintaining intervention due to lack of fuel for home visit. Conclusion: This study suggested the importance of evaluating the implementation of intervention. By evaluating them, the Ghana EMBRACE intervention showed its high potential to scale-up in the real world setting.

O-03-02 Revealing the issue of maternal deaths in Sinnar, Sudan

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[Introduction] Maternal mortality reduction is considered as one of the urgent priorities adopted in the SDGs. The Maternal Death Review (MDR) Committee in Sudan has been making effort to collect information on maternal deaths to tackle the issue. This study will reveal the situation of maternal deaths in Sinnar, Sudan. [Methods] MDR report 2010 and 2013 at national and state level were obtained and amalgamated into one Excel file for analysis. [Results] In 2010, 957 maternal deaths were observed [national: at home 151 (18.85%), health facility 806 (84.2%), Sinnar: 36 (home 6 (16.7%), health facility 30 (83.3%)]. In 2013, 858 [national: home 104 (11.9%), health facility 754 (86.6%), Sinnar: 54 (home 11 (20.4%), health facility 43 (79.6%)]. These deaths occurred: during pregnancy [national: 35.9%, Sinnar: 25.9%], when delivering at home [national: 23.7%, Sinnar: 35.2%], delivering vaginally at facilities [national: 17.5%, Sinnar: 14.8%], conducting emergency caesarean section [national: 18.9%, Sinnar: 24.1%]. In 2013 in Sinnar: 21 (38.9%) neonates were born alive and well while 20 (37.1%) stillbirths, 13 (24.1%) undelivered. Obstetric hemorrhage [national: 280 (32.1%), Sinnar: 14 (25.9%)] was the most common cause followed by hepatitis [national: 150 (17.2%), Sinnar: 8 (14.8%)], eclampsia [national: 98 (11.3%), Sinnar: 5 (9.3%)], and sepsis [national: 92 (10.6%), Sinnar: 3 (5.6%)] (2013). [Conclusion] Most common maternal deaths were obstetric hemorrhage and eclampsia which deaths might have been preventable if proper antenatal care had been provided during their pregnancy. Continuous efforts are required as an imperative task to improve basic maternal services that are suitable for rural Sudanese context.
O-03-03  Construction of the community system that promotes health of pregnant women analyzing the working situations of traditional birth attendants in rural Tanzania

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Background In Tanzania, the maternal mortality ratio is 454/100,000 live births, and birth attended by skilled personnel in rural areas is 42.3%. More than half of all women still give birth with traditional birth attendants (TBAs) and families. To strengthen the community system that promotes health of pregnant women, stakeholders in the community need to cooperate and support pregnant women. Methods In north eastern Tanzania, 15 TBAs were interviewed to ask the current activities, needs, difficulties, and perceptions toward the work. The interviews were conducted in Swahili with an interpreter, transcribed, and translated into English for content analysis. Results The processes to become a TBA included hereditary and recommendation from the village. The work of TBAs was advice on facility births, nutrition, exercise, and immunizations, and delivery assistance just in case of emergency or family’s disagreement against facility birth. The rewards were the small amount of money or resources for delivery. They were happy about their job to help the new life. Until 2001, they had received training from health facilities, and they still followed the guideline they had learned. However, without ongoing training, they were not able to update their knowledge nor to teach younger TBAs. They did not receive any support from health facilities and were even expelled when they had referred a pregnant women with complications. Conclusion TBAs continue to contribute to health of pregnant women. To secure safety of women, cooperation with facilities is inevitable to provide necessary resources and to efficiently refer women when necessary.

O-03-04  Current situation on Caesarean section in Burundian rural hospitals

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Introduction: In Burundi, due to 12 year socio-political crisis, the current situation is still challenging as the high maternal mortality rate and the neonatal mortality rate. Reducing maternal death and neonatal death is one of the important national priorities. JICA’s Project for Capacity Building of Provincial Health Staff for Maternal and Child Health conducted a field study on C-section in rural hospitals. Outline: The study targeted all 9 hospitals in Gitega and Mwaro Province which have implemented C-section. Medical records and registers of all 922 birth cases in February 2014 were retrospectively analyzed. Breakdown of mode of delivery: normal delivery 79%, vacuum extraction 3%, and cesarean section 17%. 156 C-section were observed, 142 of them were emergen-cy cases which had not planned by the operating room nor hospital. Reasons for emergency C-section were: previous cesarean section cases 35%, fetal asphyxia 23%, cephalopelvic disproportion 9%, prolonged delivery 5% and multiple gestation 2%. Furthermore, rate of keeping records of each item on C-section; start time of surgery 51.3%, end time of surgery 17.3%, blood pressure 55.1%, blood loss 3.2% and arterial oxygen saturation 0.6%. Discussion: The majority of the emergency C-section cases could be identified and planned while prenatal consultation. To improve the low rate of keeping records on C-section, revising the official medical record format and on the job training of anesthetist and medical doctors were needed. Conclusion: For safer pregnancy and child
birth, a mass sensitization on high risk pregnancy, particularly, previous cesarean section cases was suggested.

O-03-05 An experiment to expand Mother Class services in Benin

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Introduction
The Behaviour Change Communication (BCC) in pregnant women and the improvement of relationship between health care providers and pregnant women is a key issue to improve mother and child health services. The Mother Class (MC) has been initiated in 2009 in Lagoon Mother and Child University Hospital (CHU-MEL) with initiatives of ex-trainees in Japan and in Morocco.

Outline
The Ministry of Health (MOH) tried to expand the MC in public health facilities with the collaboration with JICA. After the study mission in Morocco in 2013, the national guideline in MC has been created in 2015. The three training sessions have been conducted from August 2015 to January 2016.

Discussion
The number of Health facilities providing MC has increased from 6 in 2012 to 31 on April 2016. The number of sessions per year has been increased from 20 in 2009 to 224 in 2015. Despite four sessions per month recommended by the guideline, the most of facilities conducted 2 or 3 sessions per month except the strike period. The most of health facilities had the difficulties to organise a postpartum session. The participants of male partners in MC from January 2014 to March 2016 in CHUMEL was 7.9%. The key informant interviews proved MC improved the communication between care providers and women and their utilisation of laboratory tests.

Conclusion
The MC became one of the good BCC strategies in Atlantique/Littoral departments. The further expansion to other departments depends on the effort of the MOH.

O-03-06 The impact of Project of reinforcing the Care of Maternal and Neonatal Health (PRESSMN) in Senegal

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Introduction: Since 2012, Ministry of Health and Social Action of Senegal and Japan International Cooperation Agency have implemented the PRESSMN Phase 2 nationwide to enhance the utilization and quality of maternal and newborn health care services. In order to verify the effect of PRESSMN model, baseline and mid-term survey was carried out in the five region.

Outline: Objects of this survey were as follows: To verify the care offered by service provider, the care women received, the implementation of each components of PRESSMN model, and the utilization of MCH service. The baseline was carried out in 2013 and midterm was 2016. Control group was set in 3 regions. 30 structures were surveyed.

Discussion: The number of childbirth, antenatal care, and postnatal care was improved in the structures
intervened by PRESSMN. Intervention group had positive results on practices related to normal birth indicated by WHO. The results of this survey proved the possibility to improve the offering of high quality service and the utilization in the resource limited settings. 250 service providers were interviewed in baseline survey and 227 in midterm. 771 women were interviewed in baseline survey and 730 in midterm. Conclusion: PRESSMN model has strengthened of health system and served as the national maternal child health policy to achieve UHC in Senegal. Moreover, this model has implies the possibility of contribution to maternal and child health in the resource limited settings in the neighboring counties.

O-04-01 Miscarriage and early fetal growth restriction in Bangladesh

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Background: There is limited information related to community-based study to evaluate early indicators related to miscarriage. The aim of this study is to examine the relationship between fetal growth restriction measured by ultrasound crown-rump length (CRL) and subsequent occurrence of miscarriage in pregnant women in rural Bangladesh.

Methods: The study was conducted within the Maternal and Infant Nutrition Interventions Trial in Matlab, Bangladesh. A total of 4,436 pregnant women were enrolled in the study. The expected CRL was determined based on an established growth curve of gestational age and CRL, and deviation from this curve of CRL was expressed as a z-score. After identifying related covariates, the multiple Poisson regression model was used to determine the independent contribution from the CRL to miscarriage.

Results: A total of 3058 singleton pregnant women were included in analyses. The occurrence of miscarriages was significantly higher in the smaller categories of CRL z-score after adjustments for maternal age, parity, early pregnancy BMI, gestational age at CRL measurement and socioeconomic status (RR [95%CI]: 1.03 [1.02-1.05]). Conclusion: Smaller than expected CRL for the gestational age was related to subsequent miscarriage. Ultrasound evaluation with careful clinical assessment are useful for needy care of pregnant women.

O-04-02 Clinical assessment of respiratory distress by Silverman score for the newborn infants who admitted to the neonatal care unit of National Maternal and Child Health Center, Cambodia

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<Background> There are many newborn infants with respiratory distress, who admitted to the neonatal care unit (NCU) at the National Maternal and Child Health Center, Cambodia. The accurate condition of respiratory distress, however, has been never assessed because of lack of objective monitoring methods such as pulse oximeter.

<Objective> We aimed to grasp the prevalence and severity of respiratory distress of newborn infants by Silverman score, which can evaluate the respiratory condition only with clinical symptoms.

<Method> This study enrolled 152 newborn infants, who had admitted to the neonatal care unit at the NMCHC from July 2014 to March 2015. A Japanese
resident or a Cambodian co-researcher evaluated the respiratory conditions as soon as possible after admission.

<Results> Among 152 cases, 123 (81%) were preterm and the median birth weight was 1882 ± 674g. We classified the 69 cases (45%) as clinical respiratory distress by Silverman score. Among them, 35 cases were moderate, and 37 cases were severe. The death rate was 16% (13 cases) among group without respiratory distress, 17% (6 cases) among moderate, and 59% (20 cases) among severe grade. Even after adjusting of cofounders: asphyxia and prematurity, the mortality rate with severe respiratory distress was significantly higher than moderate and normal group (p<0.05).

<Conclusion> We clinically assessed respiratory conditions of newborn infants using Silverman score. Respiratory distress is one of main problem among sick newborn infants with high mortality rate. We expect effective treatment for respiratory distress with consideration of its clinical severity, such as prior usage of CPAP for adequate cases even in recourse-limited situations.

O-04-03 Care during delivery and childbirth at the first-line health facilities in the capital city of Cambodia

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[Background] Facility-based delivery care is promoted in many countries, though the contents of medical interventions and care during delivery and childbirth are not well understood. This study aims to describe the interventions and care at the first-line public health facilities in the capital city of Cambodia.

[Methods] This study was carried out at the nine health centres in Phnom Penh city. Direct observation of women who admitted for her delivery, was carried out by external midwives in each facility from the admission until the end of the third stage of labour. Umbilical cord arterial blood was collected for pH measurement.

[Results] A total of 304 cases were observed between February and June 2015. The data from 302 singleton cephalic delivery cases is shown in this report. The numbers in parenthesis is median. Characteristics of the participants were age [26] years old, primipara 61%, the number of antenatal check-up [5]. Duration of observation was [127] minutes. Care during delivery were number of foetal heart rate check-up [0], number of vaginal examination [2], oxytocin infusion without an infusion pump 17.6%, intra-muscular oxytocin injection during the second stage 2.3%, episiotomy for primipara 72.8% and multipara 27.1%. Perineal laceration either third or fourth degrees or cervical laceration was observed in 14%. Acidosis among newborns (UA-pH less than 7.20) was observed in 19.9%.

[Conclusion] No adequate foetal monitoring and possibly harmful medical interventions were frequently observed. Quality of care should be assured when we are going to promote facility-based delivery in developing countries.
O-04-04 Factors influencing response rate to prenatal checkup in urban China

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【Purpose】Increase of macrosomia (birth weight > 4,000g) is one of the recent maternal and child health issues in China and the Ministry of Health has promoted 8 times and more medical checkups for the pregnant, including mother’s weight monitoring. This study aimed to clarify the situation of medical checkups for the pregnant and identify factors influencing frequency of medical checkups in China.

【Methods】Structured questionnaire survey was conducted in Changxing Dao, Dalian from August to October 2015. Data was collected at 2 clinics in the area, targeting mothers who took their children for immunization program (children should be less than 2 years). Descriptive statistics and Chi-squared test was used to show the results

【Results】The macrosomia rate was 16.5%. The proportion of the subjects who fulfilled recommended frequency of medical checkups for the pregnant was 98.4%. A significant association between birth weight and mother’s BMI before pregnant was identified (p<0.01). On the other hand, there was no significant association with mother’s weight gain during pregnancy. However, the macrosomia rate was among the mothers who did not fulfill the recommendation was 33.3% and among the mothers fulfilled was 14.2%. It tended that the mothers who were living with their mothers rather followed the recommendation (85.8%) and often visited clinics with their mothers.

【Conclusion】To modify macrosomia rate requires weight control of mothers before pregnancy. It is also important to fulfill the recommended frequency of medical checkups during pregnancy for proper birth weight.

O-04-05 Health Status among Children and Young Adolescent Attending a Monastic School in Yangon, Myanmar

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【Introduction】It is reported that there are more than 1,700 monastic schools caring for over 300,000 children who have limited access to healthy foods and health education. There are a few studies have been undertaken to assess the current health status among monastic-school-going children. Therefore, the preliminary study was carried out to assess physical, mental, and oral health status of monastic-school-going children.

【Outline】397 children studying at a Monastic Education School in Yangon aged between 5 and 15 years were voluntary participated in this study. Health literacy and health-related quality of life were assessed using a questionnaire. 92 students were randomly selected to assess oral health status.

【Discussion】We adopted the suggested categories as follows: less than 18.5 kg/m² underweight; 18.5–23.0 kg/m² increasing but acceptable risk; 23.0–27.5 kg/m² increased risk; and 27.5 kg/m² or higher high risk. 179 (45.0%) students were found to be underweight. Students self-reported eating more than twice a day. Almost all of 92 students had cavities.

【Conclusion】Our results show that students going to monastic schools have relatively low physical development. However this result cannot be generalized to the entire students studying at monastic schools. It suggests that studies on the physical status of school going children of different schools and communities should be monitored. In addition, students reported having relatively healthy eating habits; however, nutritional status should be assessed for the further analysis of its association with other health status. The result also suggests that oral health education for children is urgently needed.
O-04-06  Mother-to-child transmission of Chagas disease in the Western region, El Salvador

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Background: Chagas disease is caused by Trypanosoma cruzi (T. cruzi). About 8 million were estimated to be infected with T. cruzi in Latin America. Three major routes of transmissions were vectoral transmission, blood-transfusion based transmission, and mother-to-child transmission. However, little has been reported about the mother-to-child transmission in Central America. This study aimed to estimate the prevalence of T. cruzi among pregnant women and the incidence of mother-to-child transmission of T. cruzi in El Salvador.

Methods: Serological tests on T. cruzi were carried out in Sonsonate province and Ahuachapan province, the Western region. Pregnant women whose expected dates of delivery were between March, 2009 and February, 2010 were targeted. Blood samples of infants born to seropositive mothers were collected at 6-8 months and 9-16 months of age. A written informed consent was obtained from the participants.

Results: Of 943 participants, 36 (3.8%) were seropositive for T. cruzi. Of 36, 32 proceeded to serological tests at 6-8 months of age. Six infants seropositive at the first stage further proceeded serological test at the second stage. As the results, one infant was congenitally infected. Incidence of mother-to-child transmission was 0.14 (per 100 person-year).

Conclusion: Estimated number of children infected through mother-to-child transmission in El Salvador (170 per year) was much higher than that of HIV (7 per year). It is recommended that serological testing for T. cruzi be integrated into those for HIV and syphilis as part of antenatal care package.

O-05-01  Programmatic Management of Drug Resistant Tuberculosis at San Lazaro Hospital, Manila  Philippine

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Background. The Programmatic Management of Drug Resistant Tuberculosis of San Lazaro Hospital (SLH) started to function also as a treatment center of the SLH thus escalating services to case finding, case holding since 2011. Methods. Since 2012, we have been identifying Rifampicin resistance using Gene Xpert. The identified individuals were regarded as MDR-TB and were treated according to WHO guideline. The success rate of the treatment was studied and the reasons for default tracing and suspended treatment were also studied. Identification of HIV infection in MDR-TB patients was also attempted. Result. Cure rate of MDR-TB cases in 2012, was 47% and 30% of lost. In 2013, cure rate was 46% and 34% of lost. In 2015, 95 cases were enrolled. In enrolled cases, interruption occurred 8-16% during DOTS. Hypokalemia and abnormal behavior were reported to FDA. HIV-positive rate among MDR-TB cases were 0.5% in 2011 and increased to 10% in 2014 and 15% in 2015. High death rates (42-66%) and increased lost cases were noted. Discussion. The annual numbers of presumed MDR-TB cases at SLH are more than 100 and lost cases were also noted. Further, bacteriological analysis would be necessary.
O-05-02 Impact of Patient-Centred Support (PCS) on ‘Lost to Follow-up’ amongst Drug-sensitive Tuberculosis patients in a rural population of Papua New Guinea

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Background: With an estimated 25 000 new cases every year, an increasing burden of drug resistance, low treatment success and high lost to follow-up (LTFU), TB was declared a public health emergency in PNG. PNG ranks second in the Western Pacific Region and from December 2015, is on the WHO 30 High Burden Countries. This purpose of this study was to evaluate the impact of a patient-centered support intervention in reducing lost to follow-up in Gulf Province in Papua New Guinea. Methods: A qualitative service evaluation of the Patient-Centered intervention through Focus Group Discussions with health care staff provided the primary data for this study augmented with quantitative TB program outcome data. 26 participants were recruited through purposive non-probability sampling. The data was analyzed using emergent thematic analysis. Results: Qualitative evidence from the focus group discussions shows that patient-centered support might be reducing the rate of LTFU and this is supported by TB project outcome data which shows a decrease of LTFU from 36% in 2014 to 26% in 2015. Conclusion: The study shows early gains of a patient-centered approach, highlighted other areas that will not be answered by patient-centered support and concludes that PCS is relevant to this context and a PNG specific model can be developed. However, more time is needed for the intervention to be fully developed and more studies are needed to assess how much Patient-Centered intervention contributes to reduction in LTFU.

O-05-03 The Caravan for Zika Virus Infection in Paraiba, Federative Republic of Brazil.

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[Introduction] Zika virus disease (ZVD) presents usually mild symptoms, and resolve within seven days. However, congenital zika syndrome (cZS) including microcephaly appears to be consequence of zika virus infection (ZVI) in pregnancy. WHO Director General declared a Public Health Emergency of International Concern (PHEIC) over the association between ZVI and microcephaly birth defects. We joined the NGO caravan and carried out infection prevention activities in Paraiba. We report the current situation of prevention, laboratory testing, diagnosis, treatment and follow-up for cZS.

[Outline] We visited 13 sites in 13 cities in Paraiba, and observed 1,908 patients (1,349 pediatrics, 95
congenital diseases, 241 pregnant women and 318 adults) undergo clinical services. The promotion for mosquito protective measures is limited compared to larva control. A diagnosis of ZVI is made clinically. Some patients with arbovirus infection were often treated with corticosteroid to relieve their symptoms without detailed evaluation. When cZS is suspected, diagnostic testing including serology and neuroimaging will have done. For the patients with microcephaly, the Ministry of Health plans to provide social support and rehabilitation. The quality and quantity of these support still have a gap between regions.

【Discussion】Provided treatments are limited. We emphasize mosquito protective measures for pregnant women and their partners. Further studies for testing and treatment are needed.

【Conclusion】ZVI and cZS are ongoing problem all over the world. The collaboration with the government of Brazil in terms of comprehensive care, laboratory, treatment and surveillance is needed.

O-05-04 Climate effects for Cholera cases in 2008-2014, Benin

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Background
Cholera case in Benin was first reported in 1970. There have been large outbreaks in 1991, 1996 and 2001. Since 2014, Ministry of Health has improved weekly surveillance system in Cholera cases. Ministry of Health would like to set up some counter measures or a warning system for cholera cases.

Methods
The study has used the time-series methods of analysis to investigate climate effects. Weekly surveillance system data in Ministry of Health from 2008 to 2014 have been explored. We focused at So-Ava commune where the Cholera cases frequently happened in recent years. The precipitation and temperature data obtained from the National Oceanic and Atmospheric Administration (NOAA), United State Department of Commerce. We also got the Daily Water level data at So-Ava in 2013 and 2014 from Ministry of Energy and Water.

Results
The epidemiological surveillance between 2004 and 2014 reported 5,899 cases with 54 fatalities. The Case Fatality Rate is 0.9%. The seasonal and geographical patterns in Cholera cases have many variations. Cholera cases was still expanding to other communities. In Soa-va commune, the correlation between temperature and cholera case was low in 2013 and 2014. In 2013, the correlation between weekly precipitation and cholera cases in Soa-va might be high, however in 2014, lag terms (1 week) should be considered. When the water level has been increased, there was a tendency that the cholera cases might decrease.

Conclusion
Once cholera cases have identified near Soa-va commune, the precipitation and water level should be monitored. Further study is still required.
O-05-05  HIV drug resistance analysis of AIDS patients under ART in the Ba-Congo Province, western Democratic Republic of Congo

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[Background] More than 10 years have passed in sub-saharan Africa since ART was introduced. In some countries, even 2nd-line ART regimens are currently adopted. However, medical services as well as laboratory equipment are extremely poor in Democratic Republic of Congo (DRC) due to a long-lasting political instability. We have conducted the drug resistance analysis of AIDS patients under ART for the first time in western DRC.

[Methods] In January, 2016, we visited hospitals in Boma City, Ba-Congo Province, and collected 60 specimens from AIDS patients after informed consent. They were serologically screened and DNAs were extracted from PBMCs. The half genomic region of RT gene was analyzed by nested-PCR followed by direct sequencing.

[Results] The specimens were all positive for HIV by PA. Out of 60, 48 were successfully amplified and sequenced. Although typical drug resistant mutations were found in some, their frequencies were relatively low compared with Ghana where ART is more extensively executed. Yet, two specimens appeared to be multi-drug resistant.

[Conclusions] The study site was a capital city in the early years of the Congo development. Nonetheless, its historical role is already lost and human migration is restricted accordingly. Thus the area is hardly accessible from the medical services of the central government. Low frequencies of resistant mutations can be explained by this relatively short time-span after ART introduction. More importantly, the co-existence of multi-drug resistant mutations is casting a very serious question how to treat AIDS patients in such a resource-limiting situation.

O-05-06  Childhood Tuberculosis among foreign residents in Japan

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Background: Annual numbers of childhood tuberculosis (TB) cases has been decreasing in Japan, while the percentage of childhood TB among foreign residents has been increasing. However, the research on childhood TB among foreign residents in Japan is scarce. Methods: Questionnaire was sent to health centers which reported childhood TB cases to the national tuberculosis surveillance system from 2012 to 2014. We could obtain detailed information of 55 cases in 2012, 52 in 2013, and 40 in 2014 (82.6% of all reported cases). Results: The number of childhood TB patients who were born or stayed in TB high burden countries were 12 (21.8%) in 2012, 11 (21.2%) in 2013, and 10 (25%) in 2014, and in total 35 cases (25%). The male-to-female ratio was 12:23. Among those cases, 12 (34.3%) were aged 0-4 years, 11 (31.4%) were aged 5-9 years, and 12 (34.3%) were aged 10-14 years. Most of them were from Asian countries such as the Philippines (15 cases), and Vietnam (6 cases). The modes of detection were diagnosis at hospital (40%), contact investigation (28.6%), school mass investigation (11.4%), and diagnosis abroad (20%). The number of those who had pulmonary TB was 21 (60%). Among those who were diagnosed at hospital, the number of extrapulmonary TB without pulmonary TB was 10 (71.4%). There were no multi drug resistant TB cases. Conclusion: About 1/4 of childhood TB cases were from TB high burden countries. Careful diagnosis at hospital and effective investigation at the time of entry are required.
O-06-01  Issues of medical Care for foreigners-
Research on environment of hosting foreigners at H city

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Objectives: To demonstrate the situations of medical care for foreigners at medical facilities at Hirosaki City in Aomori Prefecture to specifying issues.

Methods: Questioners circulated to Medical Doctors, nurses at 6 Hospitals and Doctors in 55 independent clinics. Questions mainly asked experience of treatment to foreigners, language used, issues, hosting policies for foreigners, issues of each facilities and government administrations.

Results: Frequency of visit by foreigners has been once a month or once a half year which attended by Doctors 72.9%, Nurse 76.6%. Mainly used Language was English or Japanese. However there are increasing chances of having Asians whose tang is not English. Measures to tackle future needs at facilities were 1) Language study opportunity for staff, 2) Signboard for foreigners. However until now frequency of foreigners was not often yet. Therefore for the further implementations, 1) request for government administration to set channel to give information of medical care or introducing other medical references, 2) Prepare the forms for medical information or medical test in multiple language has been requested.

Discussions: The entire correspondent shows some magnitude of medical care needs to foreigners. However giving multiple language service is not achievable at each facility. Currently, multiple language signboards and conversation booklets available for tourist however there will be needs of information for emergency medical care or medical cares at facilities will be arising. Furthermore there will be needs of cooperation between government, NPOs and University to train medical translator and organize personal will be necessary.

O-06-02  Issues of medical care for foreigners at province level-Form Interview to foreigners

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Objectives: To specifies current situation of medical care from reception to treatment for foreigners to know issues at Hirosaki City in Aomori Prefecture.

Methods: Semi-structural Interview was performed to know duration, capacity of Japanese language, experience of medical consultancy, trouble of medical consultancy, request for facilities and others has been interviewed to foreigners who visited and lives in Hirosaki City.

Results: one third of correspondent understands Japanese, however mostly said language problem made further understanding of medical conditions harder. Therefore at the each visit to medical facilities, mostly satisfied about the behavior of attendants Conclusions: This research is results of interview to foreigner. Even though there are language problems some attitude of Omotenashi of attendants has been appreciated by foreigners. However not enough explanation of process of medical procedures and explanation on medical insurances are the main complains of foreigners. Furthermore government administration should make more specified policies and practical steps of medical care for foreigners.
O-06-03  Questionnaire survey of Japan municipal hospitals regarding the need for medical interpreters.

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Background
The purpose of this study is to investigate the number of foreign patients accepted and the need for medical interpreters in Japan municipal hospitals. They have responsibility for providing medical care and promoting community residents' health.

Methods
In 2016, we conducted a questionnaire survey at 894 Japan municipal hospitals. The questionnaire covered hospital characteristics, number of foreign patients, need for professional interpreters, and respondents' background. The IRB of the University of Shizuoka approved the study protocol.

Results
Response rate was 31.9%. By prefecture, response rate ranged from 8.3% to 69.2%. Of the 244 respondents, the number of foreign patients was 48.4% for 1-20 patients, 13.1% for 21-40 patients, and 9.4% for more than 200 patients. Of the 275, 6.2% employed interpreters, and 20.0% requested interpreters from other institutes. Of the 241, 52.3% thought that ad-hoc interpreters whom patients brought performed accurately in interpretations. The most common conditions for employment of medical interpreters were the increase in number of foreign patients and subsidy availability. Of the 272, 21.0% will utilize the interpreter service if medical fee services are available, while of the 272, 83.5% thought that they need medical interpreters who have appropriate medical interpreter's training when they accept foreign patients. The most common reason was to reduce medical risks. Of the 274, 4.7% had experiences of incident reports caused by language-barrier with foreign patients.

Conclusion
In our study, 68.9% of hospitals responding accepted less than 40 foreign patients. Our results suggested that Japanese municipal hospitals which responded have gaps between ideal and actual need of medical interpreters.

O-06-04  Factors associated with mental health status and social support among Chinese students in Japanese university.

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Background
The purpose of this study is to investigate factors associated between mental health status and social support among Chinese students in Japanese university.

Methods
In 2015, we conducted a questionnaire survey with 109 Chinese university students in Shizuoka. The questionnaire consisted of the General Health Questionnaire-28 (GHQ-28, 0-28 points, higher score indicates poorer mental health), lifestyle variables, social support (SS) scales, and respondents' background. Through factor analysis, the SS has been divided into four subscales, which are school-life (0-8 points), emotion (0-7 points), information (0-5 points), and lifestyle (0-6 points) (Cronbach a >0.734 , higher score indicates utilizing more SS). The GHQ-28 cut-off point is 5/6 as a higher risk of neurosis morbidity. We analyzed the factors using t-test and logistic regression. The IRB of the University of Shizuoka approved the study protocol.

Results
Of 75 valid responses, 90.5% were more than 23 years old and 51.4% were male. The median score of GHQ-28 was 3.0, ranging from 0 to 20. 29.3% of the respondents had the total score of the GHQ-28 above
the cut-off point and high risk of neurosis morbidity. Factors associated with neurosis risk were as follows: medical insurance status, understanding of studies, stress from cultural differences, affiliation, Japanese language proficiency, emotion SS, and lifestyle SS (P < 0.05). Logistic regression identified the factors associated with stress by cultural differences (odds ratio 21.1, CI 1.3-336.8) and emotional SS (odds ratio 0.8, CI 0.6-1.0).

Conclusion
Our results suggested that the factors associated with mental health of Chinese students in university were stress from cultural differences and emotional SS.

O-06-05 Factors that Inhibit Migrants Living in Japan from Receiving HIV Services: Analysis of Telephone Consultation Received by an NGO

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Background: The AIDS Prevention Guidelines, revised in 2012, recommends taking into consideration the language barriers faced by migrants living in Japan when receiving HIV testing and treatment. However, the language barriers still remain. For example, HIV test results are notified to the migrant through translation by family members or friends, violating the patient’s right to privacy. Research was undertaken to determine the factors that inhibit migrants from receiving HIV testing and treatment.

Methods: Analysis of telephone consultation (84 cases, 132 inquiries) received by Services for the Health in Asian & African Regions (SHARE), an NGO that provides support for migrant’s health, from April 2013 to December 2015. Results: Among the 23 countries of origin of migrants, 53.6% were from Southeast Asia. More than half were men (52.4%) and the largest age group, consisting 18 migrants, was in their 40’s. Majority (77.3%) of the migrants lived in Kanto and Koshinetsu region. 64.5% of inquiries came from healthcare providers. The highest number of inquiries regarded language barriers and request for translators (35.6%). This was followed by inquiries regarding treatment and care (25%), and then economic and social aspects of migrants’ life (11.4%).

Conclusion: HIV positive migrants living in Japan face the following barriers in receiving testing and treatment: (1) Lack of available translators, (2) Complication in immigration status and lack of health insurance, (3) Insufficient information and government benefits/schemes (4) Inadequate consultation environment. Recommendations include providing translators at critical moments; and improving Information disbursement and consultation centers for healthcare providers and migrants.
O-06-06  Medical Interpreting Training System in Japan, Current Status and Challenges

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(Background) Increasing numbers of foreigners living and visiting Japan translate into an increasing demand for interpreting services. However, Japan to date lacks national-level qualifications and there are discrepancies in the medical interpreter training curriculums. (Aim) To identify challenges in the current Medical Interpreting Training System. (Method) Paper-based questionnaire posted to 27 targeted Training Institutions. (Results) Valid number of respondents was 15 (response rate 55.6%). The number of languages covered was 12. The average training curriculum had 51.9 contact hours, with some courses running for 7.5 hours whilst others for 120 hours. Training institutions had issues with funding, being unable to answer to the intake demand, issues with finding lecturers and venues. Respondents commented on the need for medical professionals to speak in plain Japanese language, the need to educate medical professionals on how to effectively use an interpreter and some made specific requests to hospitals and clinics. (Analysis) The results show that the training curriculum is not unified and that there are differences in the syllabus and the number of hours delivered. Running workshops that will enable interpreters to share their experiences, look at specific case studies including theoretical research is desirable. National-level qualifications, Training system and professional development should be established. Applied practice at hospitals and clinics and more active involvement from hospitals and clinics in the interpreting training on the overall is desirable. Hospitals benefit from having a trained and qualified interpreter assist with communication and safety and therefore collaboration between hospitals and Training-institutions is crucial.

O-07-01  Myanmar’s health policy under new government and the landscape of external funding

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JICA Myanmar Office

The Republic of the Union of Myanmar has a new civilian government from April 2016. In this juncture, some development partners such as Denmark and Australia have decided to leave the health sector. The author discusses the health policy under the new administration and landscape of external funding.

O-07-02  Development of the New Medical Device Management System in the Republic of Moldova

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[Introduction] The health sector reform in the Republic of Moldova proceeds successfully, however, its public spending ratio for healthcare sector has remained high and efficiency in medical field is required. JICA’s technical cooperation project “Project for Improving Medical Device Management” was launched in the above situation. [Outline] The project purpose is to develop medical devices management
system through establishing D/SBME (Department / Section of Biomedical Engineering) in 5 pilot hospitals, and various activities has been implemented, such as baseline study, workshops, creating guidelines for D/SBME, training, providing testing devices, monitoring for D/SBME, and so on. In addition to brief introducing the above project activities and its results, we would like to report the progress of establishing and expanding functions of D/SBME in 5 pilot hospitals.

[Discussion] The 5 pilot hospitals started up D/SBME from June 2016. Through monitoring for D/SBME, we found that progress of expanding their functions varied in each institution since their capacity and attention on medical devices management differed hospital by hospital. On the other hand, however, we found there were some common issues they faced at the same period. This reports will show you how the Ministry of Health in Moldova and pilot hospitals tackled these common and individual issues.

[Conclusion] These days, in many other countries face the high healthcare expenditure and are required to build up efficient healthcare systems including ones for medical devices. This study would be a useful case for considering how to build up effective and efficient health system.

O-07-03 Estimating the number of bacteriologically positive tuberculosis patients among newly incoming foreigners to Japan and the potential yield of pre-entry screening

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[Objective] The burden of foreign-born patients among the newly notified tuberculosis cases in Japan is increasing. From the perspective of screening for foreign-born tuberculosis (TB) cases, we sought to estimate the prevalent number of bacteriologically positive TB cases among immigrants, defined as those seeking to stay for more than three months, coming from selected Asian countries, and evaluate the potential impact of pre-entry screening. [Methods] Immigrants from China, South Korea, the Philippines, Vietnam, and Taiwan as well as certain population groups such as those coming with student visa, resident type visa, and so on, were selected as potential targets for screening. The number of bacteriologically positive TB cases was estimated using data from national prevalence surveys. We also compared the yield of the following three possible algorithms; screening by chest radiography (CXR), and confirmation by 1) culture, 2) smear microscopy, and 3) GeneXpert.

[Results] Of the 1,507,125 immigrants from the above-mentioned five countries in 2014, the total number of bacteriologically positive TB cases was estimated to be 2,535 as well as 154 among 233,505 with student visa and 1,526 among those with resident-type visa. The highest yield could be expected by screening those with resident-type visa via CXR and culture, at 206 per 100,000 individuals screened.

[Conclusions] Our preliminary analysis indicated that the yield of screening could be improved by focusing on specific visa holders. Further studies are needed to take into account the cost-effectiveness of pre-entry screening, as well as the impact of screening for latent tuberculosis infection.
O-07-04 Literature review of introduction of District Health Management Information Software System Version 2 (DHIS2)

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[Background] Lack of reliable health information system is common challenges in developing effective health policy in many developing countries. DHIS 2 is free and open source software which most widely utilized system introduced in 47 countries. We conducted literature review of DHIS2 introduction to assess the benefit and challenge. [Methods] Articles were searched and extracted through PubMed and Google Scholar by using keywords of “District Health Management Information Software System”. Among 59 extracted articles, 12 articles were selected based on the inventory and clear description of introduction of DHIS2 as health information system. [Result] Studies were conducted in the Asian (1) and African countries (7). The DHIS2 system was introduced during 1999 to 2013 to the countries. Most of the study conducted after 1 to 2 years of implementation, Improvement of timeliness and completeness in reporting were reported to be the major outcomes of DHIS2 introduction. Implementation challenges included limited access to computers and internet, inadequate technical support, and limited work force. [Conclusion] We found that most reported introduction of the DHIS2 contributed to improve the reliability of health information while there are many challenges, and the major outcomes were widely used for indicators of utilization. Since the 12 studies we analyzed were mostly conducted in African countries and at after 1 to 2 years of implementation, further study is required to evaluate the regional characteristics and longer term sustainability.

O-07-05 Nine years of sector-wide coordination:
A unique approach for effective health development in Lao PDR

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Introduction: While levels of success of a sector-wide approach (SWAp) have varied since it was introduced in the early 1990, it has been still implemented in many countries. The Lao Ministry of Health (MOH) has been implementing a sector-wide coordination (SWC) since 2006, which consists of similar components to SWAp except for pooling fund. We report such a unique approach in Lao health sector. Outline: MOH has implemented SWC whose key principles are MOH’s ownership, a single policy framework, and a coordination mechanism, through a bilateral technical cooperation with Japan International Cooperation Agency (2006-2016). As a result, MOH and its development partners (DPs) have been aligning to a five-year health sector development plan and working in a single coordination mechanism of MOH. They also developed several strategies such as a maternal, neonatal and child health strategy and jointly implemented and evaluated it. Furthermore, MOH and JICA introduced a comprehensive annual operational plan and its monitoring system nationwide. Discussion: According to the result of the assessment on the SWC, MOH and DPs have acknowledged that SWC has contributed to improving or strengthening ownership, alignment, managing for the results, and mutual accountability except for harmonisation. Conclusion: Working environment for effective development in Lao health sector has been improved by SWC. With the comprehensive annual operational plan and its monitoring system in the SWC mecha-
O-07-06  A Trial for the Competence Assessment as an Impact Evaluation tool for the Interventions to Improve Maternal and Child Health Care in JICA Oruro project, Bolivia

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(Introduction) Japan International Cooperation Agency (JICA) has so far conducted a lot of training courses for health workforces to improve their capability. However, standardized measures have not been yet established to evaluate the impact of such training interventions. The JICA Project, Strengthening Network for Maternal and Child Health in Oruro, Bolivia, attempted to develop a questionnaire to measure overall competencies for assessing the impact of capacity development. (Methods) The provincial bureau of health in Oruro elaborated a self-administered questionnaire including 26 inquiries to measure the level of competences of health professionals. We conducted the preliminary test targeting 98 health professionals to verify reliability and validity of the questionnaire, and the main survey for 250 and 97 health staffs who were selected randomly from intervention and control health facilities, respectively. Our study protocol was approved from the ethical committee of technical university of Oruro. (Results) The preliminary test showed 0.861 of Cronbach α coefficient, and fulfilled the internal and construct validity. In terms of criterion-related validity, it indicated no statistical correlation between the total scores and age, years of service, and the number of participation in training courses. The results of the main survey will be presented at the conference. (Conclusion) Practical capability of health professionals should be evaluated to improve their performance through the assessment of competence. However, the developed questionnaire included more knowledge-based questions than practice-based ones. For the purpose of evaluating the impact of interventions, the number of questions could be reduced.

O-07-07  Health Financing and the Human Resources against TB: Case study of Okinawan DOTS and the Universal Health Coverage

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[Background] TB pandemic was a serious issue in post-war Okinawa. The mortality, prevalent and incident rate were high. Against the situation, Okinawan DOTS (Direct Observation Therapy, Short course) program against TB (Tuberculosis) and home-visit care by community-stationing Public Health Nurses (PHNs) were conducted. As a result, the mortality rate had drastically decreased.

[Objective] The research analyzes the budget allocation for TB care (both preventive and curative activities) for describing what trends and characteristics in its health financing were executed.

[Method] Relevant news, research papers, data and reports regarding TB preventive activities were collected and analyzed. Interviews to the PHNs in those days
were conducted.

[Result]
Budget for both TB care at the time represents the government’s strong stewardship. Firstly, TB treatment and drugs were free of services, except first medical check-up for TB detection. Next, stationing PHNs were salaried by the central government, and its continued until the time of Okinawa’s reversion to Japan (1972). In addition, universal coverage of health insurance could reinforce the universal health coverage for health equity.

[Conclusion]
Scarce data was one of challenges in the research. However, trends in the health budget, allocation of mid-level health worker (PHNs) to communities, even in remote islands/areas and stewardship by central government would be key factors to improve universal health coverage in TB, especially patients’ access to TB care, and largely contribute for reduction in TB mortality and prevalence rate.

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**O-08-01 Cultural Assimilation and its effects on health status among migrant workers in Chiang Mai, Thailand**

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As of 2016, 81,299 migrant workers are registered in Chiangmai. Most of them come from Myanmar or an ethnic minority group called Tai-yai. They speak, read, and write the Myanmar language. There are variations in their Thai language fluency and level of assimilation into Thai or Chiang Mai culture. The objective of our study is to examine the association between the level of cultural assimilation and health status (hypertension, diabetes, obesity, etc.). A pretest survey was conducted to validate the questionnaire.

Barry et al developed the East Asian Acculturation Measure (EAAM) Scale, validated in Asian society. There are four categories in the process of cultural assimilation. We translated the EAAM scale from the English version to the Myanmar language version, and pretested the validity of questionnaire with 30 migrant workers. The mean age of the 30 migrant workers was 30+-7.6. Eighteen were day laborers, and eight were monthly employees. More than half were engaged in construction work. All of them understood and answered the 29 items of the questionnaire. None of them was categorized in 1) assimilation, and 18 were in the category of 2) separation. Eleven were in 3) integration, and one was in 4) marginalization. The Cronbach-alpha value was 0.73, and in each category it ranged as follows; 1) 0.61, 2) 0.66, 3) 0.70, and 4) 0.74. The translated questionnaire was well received and the results seemed fair. We started the data collection at the annual health checkup obligatory for all migrant workers.
O-08-02 The details, cause and countermeasures in Vietnamese Medical accidents from Mass media report

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National Center for Global Health and Medine Bureau of International Health Cooperation

(Background)
A lot of mass media reported imedical accidents in Vietnam recently. To know details, cause and countermeasure of medical accidents is important to consider strategy of prevention of medical accidents.

(Method)
We reviewed Vietnamese web news sites with key words of medical accidents from 2012 to June 2016.

(Result)
29 accidents were reported. Outcomes after accidents are 19 dead, 8 alive, 1 aftereffect, and 1 unknown. Background of medical accidents are 13 surgery related, 5 perinatal, 5 internal medicine, 3 pharmaceutical, 2 vaccination related cases. Factors of accidents are 11 ethical issues (laziness of medical workers, refusal of treatment, slow correspondence), 10 lack of confirmations, 6 unknown and 2 intentional. 18 medical institutes which caused medical accidents admitted their faults but, 11 institutes refused faults. Some institute payed some money for family of victim but price differed from 50$ to 10000$. Even in institutes which admitted faults, directors commented only about lack of high level knowledges but not about worker's attitudes. They reported 3 criminal suits but no civil suit, so it seems civil suits for medical accidents is not common in Vietnam.

(Conclusion)
Many Vietnamese medical accidents occurred from ethical issues of medical workers. To prevent medical accidents, it is important to improve ethics of medical workers.

O-08-03 Attitudes and beliefs of the Cambodian public about schizophrenia

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Background: Stigma is among the most important factors for evaluating maturity of community mental health. This study examines the attitudes and beliefs towards schizophrenia among the Cambodian public and compare it with French data obtained by Angermeyer. Methods: The participants comprised 122 Cambodian and French people. After presentation of a case vignette depicting schizophrenia, the participants answered a structured questionnaire with 4 sections: 2 for fundamental reason, 9 for causal beliefs, 6 for expected prognosis, and 8 for emotional reactions about schizophrenia. The incidence of “support” and “objection” between the Cambodian and French were compared for each item, using the chi-square test.

Results: Most Cambodian considered a person with symptoms of schizophrenia to have mental illnesses (83.6%). They attributed the mental illness to various factors, i.e. “family trouble” (57.1%), “work stress” (52.9%), and “lack of parental affection” (43.9%). The incidence of support for these causes of schizophrenia was significantly higher among Cambodians. Cambodians tended to estimate the state of psychotic patients negatively: “Treatment won’t change the condition significantly” (53.3%), “He is dangerous” (56.5%), and “He is different” (72.8%). Conversely, the emotional reaction towards the mental illness was tender and kind; they described their feelings with phrases such as, “feel need to help him” (91.1%), and “feel pity” (86.6%), the rate of which was significantly higher among Cambodians.

Conclusion: This is the first study to elucidate attitudes and beliefs of the Cambodian about schizophrenia. Cambodian tended to perceive schizophrenia more negatively; however, emotionally, their reactions were kinder and tenderer than French.
O-08-04 Poverty, Poor Water management, Sanitation and Hygiene (WASH) and Household Size Increase Vulnerability and Worsen Household Malaria Burden in Democratic Republic of Congo

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Background: WHO estimates that African households lose about 25% of income to malaria. This study evaluated prevalence rates and socioeconomic impact of malaria on urban and rural households in the Democratic Republic of Congo in the previous 12 months. Methods: A cross-sectional study was conducted (2015) in which 152 rural and urban households participated. TMalaria Indicator Survey questionnaire was completed anonymously. Results: There were 51.3% of male and 48.7% of female heads of households surveyed. Household monthly income varied from 10 to 700 $US. Regarding Malaria prevention, 65.8% of households used insecticide-treated bed nets (ITN), 13.8% used anti-mosquito spray, 12% used ordinary bed nets, 7.2% did not use any measure. Malaria prevalence-rate among heads of households was 92.4%, with an average of 2.5 malaria episodes per person (rate of 90.1% and 88.7% in rural and urban sites, respectively); it was 89% in ITN users, 90.5% in spray users, 100% in ordinary bednet users and 100% in those who used no preventive measure. Households earning less than 200 US$ a month had 2.76 times high malaria; the risk was 3.01 times higher in those living in areas with poor WASH status. Individual malaria care expenditure was 101.56 (10.63) $US per person. Household malaria burden was associated with low education, household size, unclean living environment (latrine management, public sanitation) and low income. Conclusion: High malaria rates were found in both rural and urban households, worsening the socioeconomic status of households.

O-08-05 Prevalence of non-communicable disease risk factors among the urban poor in Bangladesh

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The burden of Non-communicable diseases (NCDs) is increasing in Bangladesh, particularly among urban residents including the poor. Although nationwide NCD risk factor surveys were conducted twice in the past, none of them included biochemical measurements. This study aims to obtain comprehensive NCD risk factor data of the urban poor in Bangladesh.

A modified questionnaire of the WHO STEPSwise approach to surveillance (STEPS) Instrument was applied to collect valid data from 2551 dweller aged 18-64 years in a poor community in Dhaka. Roughly an equal number of men (n=1008) and women (n=1001) from the interviews was invited to participate in the subsequent physical and biochemical measurements of the survey.

About 60% of men and 22% of women were current tobacco users, but smoking was only report-
Most of the participants (92%) consumed >=1 serving of fruit and vegetables per day; however, only 2% had >=5 servings. The prevalence of moderate or high level of total physical activity was 53%. Overweight/obesity was more common in women (39%) than in men (19%), while underweight was more common in men (21%) than in women (7%). The prevalence of hypertension was 21% in women and 19% in men. Prevalence of diabetes was 22% in women and 15% in men, much higher than the estimated national prevalence (7%). The prevalence of raised total cholesterol was 26% in women and 20% in men, respectively.

The study identified diabetes, hypertension, tobacco use, and both overweight and underweight were prevalent among the urban poor in Bangladesh.

Poster Presentations

P-01-01 Assessing the service availability and readiness to provide basic health care package towards universal health coverage in Zambia: A survey in Kalomo District

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Background: The Government of Zambia has spent decades in developing the basic health care (BHC) package as a guiding principle towards universal health coverage. The launch of the National Health Care Package (NHCP) in 2016 was a key milestone that merged the concepts of BHC and essential health care services into one package. This study aims to assess the service availability and readiness to provide BHC services in a rural district of Zambia.

Methods: A facility survey was conducted in Kalomo District, Southern Province, in January 2016. The District Hospital and 12 health centres were sampled for the survey. Standardised questionnaire forms were devised for each level of facility based on information from the NHCP, Standard Treatment Guideline of Zambia and the Service Availability and Readiness Assessment tool from the World Health Organization. Two survey teams were formed to obtain data. The teams collated and analysed data by means of spreadsheet.

Results: The crude average availability of BHC services was 66% for health centres and 89% for the District Hospital. Availability of services for non-communicable diseases (NCDs) were generally insufficient (<50%) compared to those for communicable diseases and maternal and child health conditions (>80%). While preventive outreach activities for malaria and immunisation were sufficient, few activities were conducted for other conditions, especially for NCDs. Lack of in-service trainings, transport means and specific drugs and medical supplies were the major impediments for providing BHC services.

Conclusion: Outreach activities and NCD services need to be strengthened by addressing the identified impediments.
P-01-02 Strengthening health systems and management towards universal health coverage: Data-informed activity planning in Kalomo District, Zambia

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Introduction: In 2016 the Government of Zambia launched the National Health Care Package (NHCP) that sets standards for health services provided at each level of health care. In relation to this, a survey was conducted in a rural district of Kalomo, Southern Province, to assess the service availability and readiness to provide basic health care (BHC); a subset of NHCP covering the first level and below.

Outline: Based on the survey findings, the Kalomo District Medical Office (DMO) has taken the initiative to develop an activity plan that aims to expand the provision of health services towards universal coverage of BHC in the district. A workshop was organised to analyse data from the survey, identify potential bottlenecks and develop concrete activities to address those bottlenecks.

Discussion: From the data analysis, it was recognised that a limited number of areas in the health system were commonly impeding on effective deliveries of different health services: human resource development, transport maintenance, drug supply, and equipment maintenance. The developed activity plan therefore targets these areas with an additional element that focuses on strengthening the zonal network and supporting system. This extra element plays a pivotal role for all activities whereby zonal health centres are designated as “hubs” bringing together 4-6 satellite clinics each to provide health services (e.g., diagnostic services) and to extend supportive activities (e.g., training, mentorship) in an integrated and cost-effective manner.

Conclusion: Strengthening health systems and management has the potential to expand BHC service coverage effectively and efficiently.

P-01-03 Survey using an assessment tool for Civil Registration and Vital Statistics in health facilities in low and middle income countries

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[Background] Civil Registration and Vital Statistics (CRVS) is one of the essential information systems to develop policies to address various public health issues. Health facilities could contribute to improving CRVS by reporting births/deaths and by diagnosing causes of deaths. However, it is not fully understood how health facilities in low and middle income countries fulfill the roles in CRVS and how they utilize CRVS to improve their health services. Moreover, there is not sufficient literature to specify the assessment tools to investigate health facilities’ roles in CRVS. Therefore, to evaluate the validity of the questionnaire developed for the upcoming multinational investigation of CRVS in health facilities, this research was designed to conduct a preliminary survey in Republic of Zambia [Method] A questionnaire for health facilities was developed based on the literature review. The survey was conducted from April to May in 2016 in Zambia by interviewing staff in charge of health information in 2 hospitals per level in primary, secondary, tertiary level health facilities [Result] The analysis of data from the interviews based on the questionnaire revealed the weak components of CRVS in health facilities. Based on these findings, several recommendations were developed for the interventions to improve CRVS. [Conclusion] By using the assessment tool, it was possible to identify the issues of CRVS in health facilities and to
identify some recommendations as countermeasures to improve it. However, further surveys should be conducted in different settings, including other countries.

**P-01-04 Processes of developing a human resources database in the Democratic Republic of the Congo**

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[Introduction] During the civil war in the 1990s, the Democratic Republic of the Congo's (DRC) infrastructure was destroyed, and its health system's resources were exhausted. Strategies for hiring health professionals were unsuccessful; additionally, the recruitment and deployment process for the country's health professionals was inconsistently planned. Therefore, the government of Japan launched the project for the development of human resources in health in DRC phase 2. This project aimed at formulating and implementing a human resources development plan. We report on the processes of developing a human resources database, and implement a human resources development plan in the Haut Katanga province. [Outline] We conducted a training program for administrators using management software - developed by the DRC’s Ministry of Health in December 2014 - and created a human resources database. We visited all health zone, conducted interviews, verified identification documents, and took photographs. We respect ethics to protect the personal secret. Staff at public sector institutes did not have registration numbers and many staff members were not professional diplomats. [Discussion] Therefore, it is necessary to consider only certified health professionals and develop a certification system. Due to the underdeveloped employment verification system, many people found jobs through personal contacts. Therefore, it is necessary to create and implement a comprehensive human resources development plan for the healthcare sector. [Conclusion] We examined the chaotic situation in the human resources field in the DRC’s health sector according to made a database.
P-01-05  Introduction of Health Information Management System in a health camp in Nepal

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[Introduction] Health information including patient records contributes to continuous care, collaboration of medical professionals, epidemiological researches and effective distribution of medical resources. However, management of health information has been often insufficient in developing countries. Nepal also has unsolved problems especially in rural areas due to shortage of medical professionals and infrastructure. Although IT system is generally helpful for information management, it has not been introduced due to obstacles such as lack of budget, unstable power and IT literacy. This project aims to develop a patient record management software named “ASHA fusion” that can overcome these obstacles. [Outline] ASHA fusion has following features: 1) working on multiple types of devices including PCs and tablets with battery, 2) simple UI for easy use, 3) sharing information among devices without the Internet. We introduced it to an outreach health camp implemented by a local NGO in suburb of Chitwan, Nepal. Discussion on localization was held with local medical professionals. We also provided them with advice on data analysis. ASHA fusion enabled local health professionals to record the data with fewer efforts and handle it after it was collected. [Discussion] ASHA fusion fits to developing countries. Local health professionals can provide care based on data of persons and community collected by ASHA fusion. [Conclusion] We only used in a one-time health camp in this activity, however, we consider that ASHA fusion is available for continuous medical care including follow-up by paramedical staffs. We will continue localization of the system into the local context.

P-01-06  Global Mental Health and Well-being Partnership, University of Tokyo

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Introduction: Global mental health (GMH) is one of the newest medical specialties in global health that is now gaining momentum. There was formerly no research group working on GMH in Japan as of 2013. The aim of this project was 1) to integrate diverse approaches to global mental health and well-being into one big picture, 2) to expand a current global mental health framework by adding interdisciplinary perspectives, and 3) to help establish a core group and a network for global mental health and well-being in Japan. Outline: Before the start of the partnership, we held fifteen lectures by invited speakers. The speakers were from ten countries and the topics included disaster, refugees, suicide and global mental health policy. The participants ranged from 20 to 30 and included researchers, students, health profession-
als and international health experts. The established network of researchers inside and outside Japan led to the establishment of a research project to evaluate the harm reduction project for drug users in Myanmar. Discussion: The preceding lectures were thought to have speed up the networking of researchers, without which it was not possible to start up a project in Myanmar as early. Conclusion: Holding a series of lectures was thought to be an effective way of networking and facilitating start-up of research projects.

P-02-01 Children with disabilities in low- and middle-income countries and the use of PEDI-CAT: a review of the English literature

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[Background] Child survival in low- and middle-income countries (LMICs) has long been one of the most urgent issues for global communities to tackle. Recently, there has been an increasing need to respond to the rapidly-growing demands for a rights-based consideration of children with disabilities (CWDs) in LMICs. In a recent prevalence study we conducted in Nicaragua, we employed the Spanish version of the Pediatric Evaluation of Disability Inventory - Computer Adaptive Test (PEDI-CAT). However, most of the existing resources on the functional abilities, functional delay, and lives of CWDs are written in English. Therefore, it is useful to conduct reviews of both English- and Spanish-language articles. The purpose of this study was to review the relevant English literature.

[Methods] We searched PubMed and reference lists of relevant publications for terms related to 1) LMICs and CWDs, and 2) PEDI-CAT. Original articles from 2007 onwards were included, and the studies were categorized.

[Results] Sixteen primary studies of CWDs in LMICs were identified. There were seven literature reviews, and three field studies that clarified the influence of CWDs on their mothers’ or carers’ health or the effect of intervention on the care-givers’ well-being. Seventeen primary studies of PEDI-CAT were found. Nine articles focused on the test’s development process, and six on its clinical use.

[Conclusion] Although the literature on CWDs in LMICs is limited, this review demonstrated that the burden of care of CWDs is a key concern. It also found that the English version of the PEDI-CAT methodology has been well-studied.

P-02-02 Field research on change in health habits and lifestyle of residents, accompanied by construction of waterworks in Kimbond, Democratic Republic of Congo

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“Introduction” Democratic Republic of Congo is the 176th country of Human Development Index and regarded as one of the poorest country in the world. Every year, our team held health promotion workshops and health-check up in Acadex Primary School, which is located in Kimbond, Kinshasa, Democratic Republic of Congo. “Outline” We made a map of waterworks construction in Kimbond area and send out questionnaire about health habitats to Acadex student’s parent. We compared the result with the results of 2012 ~ 2015, and found out that nearly all the family ensure drinking water from waterworks.
and the time spent on drawing water is shortened. "Discussion" The lifestyle of residents around Acadex primary school is changing since the construction of waterworks makes local resident easier to access to drinkable water. It is expected to give big influence on major water drawer; women and children. Also it is likely that gaining quantity of qualified drinking water will lead to health habitats such as washing hands. "Conclusion" This year’s survey revealed that improvement of waterworks had changing the lifestyle of residents around the area. We continue to investigate how lifestyle will change by the improvement of waterworks and make a suggestion on health promotion workshop to match the local people’s need.

P-02-03  Study on the system construction towards local-school-led health check at Acadx school in Kinshasa, Kinbondo Democratic Republic of the Congo

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[Introduction] Since 2008, Keio University has been conducting a project in Kinbong district Kinshasa in Democratic Republic of Congo. Under the educational philosophy that aim the children' healthy growth, we conducted the forth health check in 2015. However, health check we’ve done was carried out mostly by Japanese people. It’s been a challenge to run a health check by local people. In order to achieve this goal, we tried to share the knowledge with Acadex school teachers and local doctors. [Outline] With the goal above, we’ve conducted workshops to share purposes and meaning of health check. And we’ve carried out the health awareness survey for teachers and doctors. [Discussion] We could raise teachers’ awareness on health check. However, local-school-led health check hasn’t been seen yet. Thus we will continue to share purposes of the health check and remain committed to build the health check custom to be carried out by teachers and local doctors. [Conclusion] In future, it’s required to conduct the workshop that enable the teachers to learn the methodology of health check. Also it’s required to conduct workshop that students and their parents can realize to participate health check continuously.

P-02-04  Health education in the Kimbondo District, Democratic Republic of Congo

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[Introduction] The Acadex Elementary School Project is conducted in the DRC with the objective to improve students’ health. We have held health check-ups, workshops, and field investigation for four years. We found that the people of this district do not have adequate information about health and hygiene, and that the average weight and height of Acadex students underline WHO standards. To address this situation, workshops on hygiene and nutrition were conducted. [Outline] We conducted a handwashing and tooth-brushing workshop for 20 students to teach them the importance of disease prevention. We also held a nutrition workshop for 30 adults about the main nutrients and the well-balanced diet. [Discussion] Students showed interest and actively practiced hygienic skills. Some children bled from brushing their teeth too hard, a problem that should be addressed next. In the nutrition workshop, we succeeded in capturing interest and some participants stated that they will utilize the new information when cooking. [Conclusion] We succeeded in arousing interest in health, but in order to maintain this inter-
P-02-05  The association between Child Health and Women’s Participation in informal microfinance institution in rural Burkina Faso-from the point of view of Social Capital

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Purpose: This study aims to explore the association between Child Health and Women’s Participation in informal microfinance institution in rural Burkina Faso from the point of view of the Social Capital.

Methods: A questionnaire survey was conducted to women aged 20-45 years living in the rural village of Burkina Faso and logistic regression analysis was adapted. Results: A total 563 subjects effectively responded the questionnaire (100%). The ratio of respondents belonging to microfinance institution was 14.4%. Economic status was higher in membership and their children have been statistically taking more animal protein. Regarding the experiences of death of children aged under five years, there was a negative association with facility based delivery and monogamy (OR=0.050 [95%CI; 0.005-0.519] and OR=0.387 [95%CI; 0.156-0.961], respectively) in the group aged 30 years or under and there was a negative association with the educational background of the husband (OR=0.326 [95%CI; 0.109-0.975]) in the group aged 31 years or over. In all analyses, no significant relationship was seen between child survival and membership. One of the reasons of non-membership is due to economic reasons, such as membership-fee payment difficulty, while some answered no benefit from microfinance. Conclusion: The participation of microfinance was suggested to contribute women’s health promotive practices. However there is no relationship between Child survival and the membership. Certain economic status and decision-making of women were required to be membership, therefore the microscopic aspects regarding inclusion and exclusion would be considered for program development based on Social Capital.

P-02-06  Sanitation, health and children and youth civic participation in peri-urban Lusaka, Zambia: Assessing social values and quality of life.

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Background: Though improving, Zambia struggles with poor sanitation and health. According to the United Nations Children’s Emergency Fund (2015), 36% and 50% of the population lack access to clean water and sanitation facilities whilst infant, neonatal and under-five mortality rates are quite high (at 70, 34, and 119 per 1,000 live births respectively). The move from Millennium Development Goals to Sustainable Development Goals renews focus on youth civic participation as a solution. However, levels of youth participation remains limited. Over 60% of Zambia’s population are under 24 years of age, yet they are underestimated as change agents. This research highlights preliminary data collected and analysed for a future action research study focused on sanitation, health and civic participation. Method: Qualitative and quantitative data were collected from 3 peri-urban communities (approximately 100 re-
spondents each) in Lusaka, Zambia alongside community mapping. The focus was on sanitation, health and civic participation in relation to the quality of life of the research population. Expected Results: We will discuss community values and views in regards to sanitation, healthcare and the civic participation of children and youth. Results are expected to show varying levels of value attached to different sanitation types with these values having an effect on health data. A positive response is expected towards the civic participation of children and youth in the community. It is expected however, that this positive feedback will not tally with the amount of available opportunities for children and youth to take part in and/or lead community projects.

P-03-01 Implementing Oral Health Program as a part of Community Based Health Promotion in rural Nepal

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<Background> Oral health is one of essential component for Quality of Life. In Nepal, due to lack of adequate oral health service such as hygienic dental clinics and oral health education, many Nepalese are suffering from dental problems, especially in remote area. Community based health promotion project has been started in cooperation with a local community in Hetauda and the authors’ research team. According to needs of the community, the oral health program was organized to provide dental examination and oral health education.

<Outline> This community based health promotion aims to empower community resilience and empower self-care abilities of local residents. Community committee, women’s group work together to conduct health programs with the research team. Income generation program is initiated by the community committee to be able to finance whole health programs. Regular health checkup and educational workshops are planned to empower health knowledge and skills of residents.

<Discussion> In June 2016, 63 residents participated in the program. By having their teeth examined by experienced dental hygienist, residents understood own dental condition clearly. And that motivated them to practice brushing teeth more often, and improved health behavior. Progress of income generation programs also promote awareness of residents for health promotion.

<Conclusion> Target community residents are aware of health education and are becoming more active for health program with the progress of income generation program. Continuous progress for a sustainable health promotion is expected.
P-03-02 ASSESSMENT OF THE EXTENT OF COUNTERFEIT MEDICINES IN MANDALAY, MYANMAR

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Background: The aim of this project is to examine the situation of counterfeit and substandard medicines and to prevent the spread of them in Myanmar for the first time since the availability of them in Myanmar was reported by WHO in 1999.

Methods: Target medicines were tablets of Candesartan, Metformin, Pioglitazone and Tadalafil and infusions of Ciprofloxacin and Levofloxacin. Samples were collected from hospitals and pharmacies located in Mandalay. We did observation, authenticity and quality test (quantity, content uniformity, dissolution, identification, sterility and endotoxin test).

Results: A total of 236 samples (58 brands) were examined. In the observation, different solutions in regard to volume were observed with same samples. 23 of 92 shops stored samples under the labelled temperature, so most of the samples were not stored as required. In the authenticity, 6 of 50 manufacturers answered. In the quality test, some tablets of MF and PG made in India didn’t accept the dissolution test.

Conclusion: As counterfeit medicines were actually detected at community pharmacies in Myanmar, the government should monitor continuously, guidance to establishers and rule out from Myanmar. Regular surveys to monitor counterfeit and substandard medicines would be highly recommended.

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P-03-03 Effect of the provision of tailor-made home exercise materials on health-related variables in Spanish-speaking outpatients with chronic low back pain: two-group experimental study

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Background

This study aimed to clarify the effect of the supplementary use of tailor-made materials for home exercise (HE) instruction on health-related variables in patients with chronic low back pain at an outpatient clinic in Costa Rica.

Methods

Forty-seven outpatients (8 men and 39 women) with chronic low back pain who attended a clinic, provided informed consent to participate in this study in 2015. The subjects were randomized to either the HE group (49.2 ± 14.5 years) or control group (50.3 ± 13.8 years). Printed instructional materials in Spanish were provided to the HE group. Measurements were performed at the first (pretest) and third visits (posttest) in 3-month intervals. A questionnaire was administered to assess life satisfaction, and pain and exercise habits were assessed by using a numerical rating scale and Likert scale, respectively. Changes (from pretest to posttest) in scores in each group were identified by using the Wilcoxon signed-rank test and compared between the groups by using Student t tests. A P value of <0.05 was considered statistically significant.

Results

Life satisfaction significantly improved in the HE group (P<0.01) but did not significantly differ from that in the control group. Pain significantly decreased in the HE (P<0.01) and control groups (P<0.05). Exercise habit also significantly improved (P<0.01). The HE group had significantly greater improvements in life satisfaction and pain than the control group (P<0.05).

Conclusion
P-03-04 Utilization of crowdfunding for the mobile library to provide health education in rural Tanzania

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Introduction In Tanzania, 44% of girls experience first pregnancy or childbirth by the age of 19. Adolescent pregnancy is related to higher risks of mortality, and 8000 girls drop-out from schools every year. Hence, we utilized crowdfunding for the mobile library for adolescents to learn about health and to access information as they want. Outline The purpose of the project is to improve health behaviors of adolescents as they hope for the better future by learning in the mobile library. To start crowdfunding, we wrote letters or emails to friends. We constructed the crowdfunding website to attract people’s attention and distributed the information using SNS frequently. During the period, we held four events, received ideas for success, and were introduced to more people. The project was published in the journal and internet media. As a result, we raised more than 3.6 million JPY and successfully bought a car. Some donors declined the returns as they simply wished the success of the project. Discussion We found that people who had already known us, people who met us in the events, or those who work with similar interests tended to be donors. It is important to increase trust in the process and the feasibility of the project. Also, the significance of the project as well as the networking and distribution of the information are the keys. Conclusion The success in crowdfunding requires abilities to connect with people, to keep the strong commitment, and to create trust with donors.

P-03-05 Diffusion of prosthetic appliances in rural Ghana: Focusing on collaboration between donors and local institution

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Introduction Prosthetic appliance is one of the effective measures to boost activities for persons with disabilities (PWDs). Because of limited social services in Ghana, PWDs have less opportunities of social participation. Drawing upon a two-year working experience at Orthopedic Training Center (OTC), a structural bottleneck is described. Outline Research was done to grasp how prosthetic appliance were been used. Distribution pattern of workshops of prosthetic appliance and operating condition were observed and investigated through interviews in southern Ghana. The result identified that there were 10 workshops, less resources in rural areas. While about 60 percent of the persons who regained ability of walking succeeded in social participation. Discussion Key challenges are: 1. Transportation to workshop is costly as well as prosthetic appliances 2. Some of donated items are left unused, 3. In rural hospitals, doctors have less knowledge about prosthetic appliances. To overcome the bottleneck, proposals from the experience at site are; distribution system involving rural workshop, and supply-demand matching review are in need. Conclusion Although PWDs are in need of prosthetic appliances, availability is limited. Utilizing of resources through combined effort between international organizations and the
government can reduce wasted donation, and enhancing understanding about prosthetic appliances among medical professionals.

**P-03-06 An approach to the improvement of wearing rate of hearing aids in the Republic of Malawi**

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[Background] As for the donation of hearing aids in developing countries by mainly NGO groups and hearing aid makers since around 1960. The Republic of Malawi also received many of the hearing aids. However, there are very few reports concerning the follow-up survey after the donation. In the special support school for hearing-impaired children to which the author belonged, many pupils did not wear the hearing aids. Therefore, in this study, in order to improve the wearing rate of hearing aids, we experimentally created and implemented an auditory evaluation method and an auditory training plan in cooperation with the teachers on-site, aiming to promote the wearing of hearing aids. [Methods] Subjects are 41 hearing-impaired children (Age Range: 7-19; Hearing Ability Range: 39-110dB). Two experimental steps were carried out: (1) We experimentally created Malawian speech discrimination test with single syllable 100 sounds and a 20 words. (2) It was carried out four weeks of Auditory training. [Results] Speech discrimination test was good grades wearing hearing aids compared to the out of hearing aids. And children of higher hearing loss were lower than other. Although hearing aids wearing rate of school 20.1% but, hearing aids wearing rate of the children who received the training were 63.4%. [Conclusion] In this study, it was suggested that the intentional implementation of auditory evaluation and auditory training helped to promote the effect of wearing a hearing aid.

**P-04-01 Bottom-up approach to strengthen a strategy for community-based malaria control: A qualitative study analyzing microscopists’ perception in Palawan, the Philippines**

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Background: Palawan is one of the highest malaria endemic provinces in the Philippines, where microscopists have active roles for bringing malaria diagnosis and treatment closer to household. To strengthen this community-based malaria control and to propose additional bottom-up strategies for the elimination of malaria in Palawan by the year 2020, perceptions of their terms of references from microscopists’ viewpoint were collected broadly and examined. Methods: Four focus group discussions with 50 microscopists were conducted in Palawan from November 2010 to February 2011. During the discussions, the following open-ended questions were addressed: motivation for applying to be microscopists in Past category, job satisfaction, role, problem, saddest and happiest experience working as microscopists in Present.
category, and willingness towards task shifting in Future category. Data were transcribed and analyzed by the framework analysis using NVivo software program.

Results: The present study proposed the following strategies: reinforcement strategy (adequate supplies and settings), highly prioritized additional strategy (issuing travel budget, and comprising indigenous population), regional additional strategy (additional malaria control in the southern region, and task shifting in the northern region), and less prioritized additional strategy (employment policy, improving social status of microscopists, and health check up).

Conclusion: Bottom-up approach using microscopists’ perception would be valuable methods to propose practical and effective additional strategies for strengthening community-based malaria control.

P-04-02  Tuberculosis infection status among foreign students in a Japanese language school in Kurume city

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[Background] Group infections of Tuberculosis occurred among foreign students in a Japanese language school, in Kurume city in Nov. 2012. We conjectured that students from tuberculosis high-burden countries were actually carrying tuberculosis when they entered Japan and clinical symptoms rapidly developed after exposure to the stress and strains associated with living in a foreign country. To investigate tuberculosis infection status of students, we conducted laboratory tests on the students in the school.

[Methods] We conducted IGRA (Interferon-Gamma Release Assay) tests on all new students from 2012 until 2015. We also conducted thorough examinations if the results were positive.

[Results] In total, 512 new students in their teens and twenties received the IGRA test over the four years periods with 37 (7.2%) of the students testing positive and 6 (1.2%) showed clinically abnormal signs such as pulmonary tuberculosis or cervical lymph node tuberculosis in thorough examinations. However no student tested positive in sputum smear tests.

[Conclusion] 7.2% of the student tuberculosis test was positive. This value is three to ten times higher than that for Japanese in the same age group, suggesting that many people infected by tuberculosis are entering Japan commonly. The students identified as tuberculosis positive by IGRA tests were completely treated by DOTS (Directly Observed Treatment Short course) before developing clinical symptoms could worsen. These students received support for their daily lives in Japan and health management from the school staff. To strengthen actions against tuberculosis invasions, we need to build economical and effective screening system.

P-04-03  The present state of mother-to-child transmission in HIV positive women and the factors affecting to prevent mother-to-child transmission under the civil war in Central African Republic (CAR).

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[Background] CAR introduced PMTCT (Prevention Mother-to-child transmission HIV), circumstances HIV-positives getting worth by civil war from 2012/ end. HIV positives pregnant/birth, feared increasing mother-to-child transmission. This study aiming to clarify mother-to-child transmission HIV positives.
affecting factors to prevent mother-to-child transmission in CAR under war. [Method] Conducted interview survey including HIV treatment, guidance to prevent mother-to-child transmission, child transmission, 51 multiparous HIV positives coming periodic medical examinations 2015/9-2016/1 in a facility in capital Bangui. Analyzed, setting 1) Child transmission to dependent variable for mother-to-child transmission affection, before/under war to independent variable, 2) Child transmission to dependent variable, antiretroviral drug (ARV)/guidance before pregnant to independent variable, and cross-totaling, for preventing mother-to-child transmission affecting factors. [Result] 1) Existing child transmission was 6 (60%) under war, 4 (40%) before war, no significant difference was found “p=0.29”. 2) For existence of child transmission and affecting factors, with ARV during pregnancy was 2 (20%)/8 (80%) “P=0.46”, with guidance before pregnant for mother-to-child transmission was 1 (10%)/9 (90%) “p=0.07”. [Conclusion] No increasing HIV mother-to-child transmission found under war. The facility was conducting mainly HIV treatment and mother-to-child transmission prevention in HIV positives from before war. Continuous treatment under war is considered. For the affecting factors of mother-to-child transmission, no significant difference was found from the effect of guidance for mother-to-child transmission before pregnant, however, the tendency of lower child transmission was found. The effect of guidance for mother-to-child transmission before pregnant was suggested, because only a woman of child transmission was found among those who got guidance before pregnant.

P-04-04 Fact-finding study of antibiotic stewardship programs in Nepali Health Facilities

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Background: Globally, antibiotic resistance is an emerging threat in public health issue. Recent previous studies from Nepal gave cautions that the prevalence of multiple drug-resistant pathogens such as a novel New Delhi metallo- β -lactamase variant. In response, Tribhuvan University Teaching Hospital (TUTH) and National Center for Global Health and Medicine (NCGM) have focused on nosocomial infections since 2010 and have reported early implementations of nosocomial infection control programs at 17 hospitals in Kathmandu. However, few is publicly available to evaluate antibiotic stewardship programs from Nepal. We conducted a study to investigate the actual conditions of antibiotic stewardship programs in Nepal. Methods: A questionnaire study was conducted in primary, secondary and tertiary level health facilities at Kathmandu valley, outlying towns of Kathmandu and Pokhala. We interviewed a responsible person of antibiotics in the health facility, a pharmacist and a microbiologist. Results and Conclusion: Interviews were conducted 27 at health facilities. The breakdown were 9 primary, 2 secondary, 19 tertiary level: 14 public and 13 private health facilities. In public and private hospitals, hospitals provided an antibiotic team, hospitals which provided infection guidelines, hospitals restricted use of some antibiotics were respectively (0%, 18%), (33%, 55%) and (11%, 27%). More private hospitals than public developed antibiotic steward system. The results of the same items in this order between secondary and tertiary hospitals were respectively (0%, 18%) was (33%, 55%), (11%, 27%). It is not easy to tackle with antibiotic resistance, however, it is necessary to start from where it can be here and now.
P-04-05 Evaluation Study of Harm Reduction Programs for Injecting Drug Users in Myanmar

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[Background] The effectiveness of harm reduction program (HR) for injecting drug users (IDUs) has rarely been evaluated in developing countries. [Method] This study is a two-year cohort study with IDUs living in two areas of Northern Shan State, where a local NGO (SARA), and a local hospital provide HR. IDUs will be recruited by Respondent Driven Sampling. Methadone maintenance therapy (MMT), needle exchange program (NEP), education program will be provided in the intervention area and NEP will be provided in the control area. HIV test and interview using structured questionnaire in Burmese will be conducted four times. The associations between service usage and the primary (HIV infection and risky behavior) and secondary outcomes (Self-efficacy on stopping risky behavior, depression and QOL) will be examined using logistic or multiple regression, demographic variables. The calculated sample size was 137 in each group, using national prevalence of HIV among IDUs (23.4%), and estimated dropout rate of 40% for power of 95%. A bilateral p-value < 0.05 will be considered statistically significant. [Discussion] The present study is one of the few cohort studies on HR, which enable us to measure accurate incidence of HIV infection. The limitation of this study is lack of generalizability because most of the subjects have origin of ethnic group and possibility of selection bias due to the sampling method. The result might make some suggestion on future activities in Myanmar. [Summary] Our cohort study will accurately evaluate the effect of HR on the incidence of HIV.

P-04-06 Evaluation of Knowledge, Attitude and Practice on HIV/AIDS in Secondary Level Students of Biratnagar

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Background: HIV (Human Immunodeficiency Virus) / AIDS (Acquired Immune Deficiency Syndrome), a pandemic disease, is necessary to be understood. The objective of study was to assess the knowledge of students, attitude and their actual behavior in the community regarding HIV/AIDS. Method: The cross-sectional survey used a self-designed and pretested structured questionnaire to gather data from secondary level students as they are of vulnerable age group. Among total 18 secondary and higher secondary schools, 12 schools were selected dividing the whole city into three hypothetical zones for better representation. The study was conducted from 27th January to 26th February, 2012. Results: Total participants were 516. Among them 318 (61.3%) were female, 1 (0.00194%) was from third gender and rest were male. Students had basic knowledge about the transmission, causative agent of HIV/AIDS. About 48% knew that there are some differences in HIV and AIDS but only about 10% knew the correct differences. Almost 86% among about 90% who believed HIV/AIDS to be caused by germs pointed to virus. About 15% of the students knew the symptoms associated with this condition. Almost 22% explained the correct incubation period and differed significantly with gender (p=0.00). About 36% had the knowledge of different stages after HIV infection. About half of the students (45%) would encourage the affected to live normal life and overall attitude towards the condition was good. Conclusion: Knowledge about the difference in between HIV and AIDS was poor in the students. Students need awareness about the condition and associated symptoms.
P-05-01 Internship Program of International Medicine for senior residents “Project of Tokushima Prefecture”

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[Background] Under the questionnaire, 2.3% of medical students of Tokushima University are interested in international medicine. If attaching this result to this country, around 200 students interested in it would graduate per year in Japan. But almost of them lose their interest and hope after being doctors due to compulsory internship, very hard working and had working environment for making their dream come true. I assure departments of general medicine have to bring doctors like them up well.

[Outline] In November 2015, I worked in Mwinilunga District Hospital (Zambia) and accepted intern student from the department of general medicine of Tokushima University. In first week he surveyed this hospital and in second week attended at activity of NGO ORMZ, mobile clinic for rural sites. He discussed in his presentation after this internship about the need for offer special educational program for internship doctors who want to be international medical doctors.

[Discussion] I think the offer of special program under the education after graduation is important for raising manpower for international cooperation. Tokushima Prefecture is preparing the special program for senior residents of Kaifu prefectural hospital, 3 months internship in developing countries with collaboration of some organizations under guarantee of status and salary named Internship Program of International Medicine (IPIM).

[Conclusion] It is the objective of IPIM to inspire the passion for International medicine of resident doctor and make numbers of doctors who active in developing countries increase. We need to confirm the effect of this program in future.

P-05-02 Human development for global health professions through Nepalese school health program of multicultural and interprofessional students and young professionals

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<Background> Human development is vital to enhance global health service in 21st century. Through conducting school health programs in Nepal villages, interprofessional and multicultural students deepen understanding of complex background of international societies and developed skills of multicultural communication and collaboration.

<Outline> Every August from 2013, interprofessional students and young professionals formed a team to conduct school health programs in Nepalese villages. The team organized various health education and conducted health checkup, working with each school staff. To support school health checkup, IT education was implemented to save health checkup data. In 2015, three Nepalese members were invited to study Japanese health service and presented their research at the annual conference of Japan Association for International Health. In 2016, 12 members will participate in the summer program.

<Discussion> From 2013 to 2015, total of 36 students and young professionals from Japan, Nepal and Korea participated in this program. Overcoming barriers in language, culture and values, members worked together to achieved goals and developed own skills for multicultural communication and collaboration. These experiences also enhanced their insight of complexity of international societies. After participation, all members keep studying to be global health professionals in future. About half of them are active in conducting research.
<Conclusion> Providing international activity environment to young generation is an effective strategy to raise future global health professionals who can also be leaders in domestic health services. Wider network is needed to keep providing opportunity for young generation.

P-05-03 Analysis of jaih-s OBGs career and report

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We, jaih-s (Japan Association for International Health Students Section) focus on human resources development. Many students in Japan want to work abroad but they don’t have idea how to pursue their career in the field of the global health, so we give students opportunity to talk with experts who play important roles in the world now through making events which they can study global health. We asked old member of jaih-s, who made the world theirs stages, and made it clear what role jaih-s events plays in opening career. On the base of this result, we try to serve as a bridge between students in Japan and experts in the world.

P-05-04 Junior residency and training in global health: its potential needs and barriers

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[Background] The Global Health Committee was newly set up in 2013 in Saku Central Hospital to strengthen our commitment to the betterment of the health of the underserved both in Japan and worldwide. We conducted this survey to reveal the potential needs and barriers for training opportunities of the global health among medical students and junior residents.

[Methods] In March and April 2014, among 25 medical students and 29 junior residents questioned, 21 (84%) and 25 (86%), respectively, answered to self-administered questionnaire on their attitudes toward the global health. [Results] 43 respondents (93%) were interested, and 36 (78%) were willing to participate in such training opportunities. 31 (67%) considered careers in global health in the future. Barriers on the other hand were scarce training opportunities (50%), difficulty in balancing between careers and personal life (46%), and unstable salary and employment (46%). 44 (96%) agreed that the training on global health can make the residency program more attractive and competitive.

[Conclusion] Medical students and junior residents were shown to be interested, widely and highly, in the global health. Further analysis is necessary if the training can benefit the retention of such human resources for health.
P-05-05 Building multi-institutional network, Tochinoki Network, for connecting global and community health

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[Introduction]
Individuals who engage in global health in long duration often meet several difficulties, such as safety issues, unstable income, family problems, and lack of job opportunities. In contrast, community healthcare facilities in rural areas in Japan suffer from medical depopulation problem; many local hospitals seek for healthcare providers. Motivated young medical staff are often interested in both global and community health

[Outline]
In 2015, we built up multi-institutional network, Tochinoki network, for connecting global and community health. Core members belong to a variety of organizations including hospitals, universities, public agencies, and non-governmental organizations. We organize and provide multidisciplinary information about global and community health through our seminar, homepage and Facebook.

[Discussion]
Our network can support young healthcare providers to build up their career in global and community health. We also promote employment opportunities in local hospitals and for medical staff. In addition, new ideas for collaborative projects come up through hot discussion within the seminar.

[Conclusion]
We built up multi-institutional network, Tochinoki network. We try to support sustainable activities in global and community health through organizing the network and providing multidisciplinary information.

P-05-06 The Effect on Students’ Learning by Classes with the Participation of People Involved in the Field: International Nursing Classes

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It can be said that classes that include the participation of people involved in the field provide students with the opportunity for hands-on experience, which has the second biggest impact on their learning after on-site training. In this academic year, University C has therefore begun offering such classes in international nursing. This study discusses the effect on students’ learning by these classes. In this study, 79 second-year students in the department of nursing at University C, who attended an international nursing class in which certain people involved in the field participated, were, after the class, asked to freely write about two points: what they had learned in this class and what challenges they would take on. The contents of the papers submitted by the students were classified by context to examine how the class affected the students’ learning. Examination of the students’ papers has shown that the class helped deepen their understanding of the class’s subject, basic information about a foreign culture, and differences in nursing between Japan and a foreign country, as well as the proper consideration required to build working relationships with international nurses. This study has found that classes with the participation of people involved in the field have an effect on students’ learning, in that the experience enables them to use their sensibility to understand the class’s subject and nursing from the standpoints of the people involved, and to learn how to establish relationships with international nurses—something they cannot gain from ordinary classes.
P-06-01 Practice and recognition of traditional practices for pregnancy, childbirth and postpartum among Laotian women living in Japan

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Background: Regarding pregnancy, childbirth and postpartum, it is believed that the health and satisfaction of expectant or nursing mothers affect whether they implement their own traditional practices or not. However, it is not clear if this is the case with minority Laotian women living in Japan. Therefore this study clarifies the implementation and recognition of traditional practices among Laotian women living in Japan.

Methods: The target sample was 10 women who matured in Laos (up to 15 years old) and experienced giving birth in Japan. The survey period was April to May 2016. A semi-structured interview was implemented then analyzed qualitatively and descriptively regarding the content and recognition of traditional practices for their pregnancy, childbirth and postpartum which were followed in Japan.

Results: Targeted age group for interview were in their early 30s to late 50s (average age: 45.5). The reasons for coming to Japan were as refugees (6 persons) and for marriage (4 persons) and their spouses are all Laotians. They resided in Japan from 3 to 30 years and they had 1 to 3 children who were born in Japan. The results revealed that they implemented their traditional practices for pregnancy, childbirth and postpartum although contents of implementation for this were different depending on the individual.

Conclusion: Although there were individual differences among the sample, they selectively followed traditional practices regarding pregnancy, childbirth and postpartum and reconstructed them according to the situation in Japan. Moreover, we acknowledged that they also recognized the importance of their traditional practices.

P-06-02 Multilingual interface to support limited Japanese proficient women during postpartum care

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Background As part of a project to support communication between limited Japanese proficient (LJP) mothers and health workers during the postpartum, we developed a multilingual e-book containing text and educational videos (breastfeeding methods, diaper changing, etc.). An interview was conducted to evaluate the utility of a multilingual e-book in the provision of health information to LJP women during the postpartum. Methods Seven women (Korean and Chinese nationals) who agreed to participate in the study received the e-book and were instructed to use them during postpartum hospitalization. A semi-structured interview was designed to collect information regarding this method of information provision, and the adequacy of the contents. Interviews were conducted after clinic staff had provided newborn care orientation to postpartum mothers. Participants received information on the research and confidentiality issues. Results LJP women considered the e-book was effective. Videos were the preferred method of receiving information because they were easier to understand. Participants referred benefitting from the information on baby bathing before attending the clinic’s baby bath session. The tool also benefited the participants’ LJP mothers, who grasped better understanding of Japanese hospitals. Additionally, we found that in some Chinese communities, reading during immediate postpartum is considered detrimental to the health of the mother. Conclusion Multilingual interface tools can improve the hospitalization experience of foreign mothers by guaranteeing timely provision of necessary newborn care informa-
P-06-03  Report on International Town Health Care Room in Hyogo: Health promotion for foreign residents

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Introduction The International Town Healthcare Room was opened within the Research Institute of Nursing Care for People and Community, University of Hyogo in September 2012. Since that time, it has performed activities to continuously support foreign residents’ health. Abstract Healthcare events for foreign residents are held by the International Town Healthcare Room in the afternoon of one Saturday monthly. Each event consists of: somatometry, blood pressure and bone density measurement, arteriosclerosis assessment, health and parenting consultations, and health promotion programs. In FY2015, 12 events were held with a total of 477 participants, and the total numbers of measurements and consultations were 1,493 and 742, respectively. The contents of consultation included: difficulty in understanding doctors’ explanations or those of diagnostic test results, and distress due to maladjustment to a different culture. Discussion Since its opening in 2012, the International Town Healthcare Room has accommodated foreign residents’ needs for health measurement, as well as a wide range of consultations concerning health promotion and mental distress. These activities have been useful to resolve the health problems faced by foreign residents daily, and improve their lifestyles, providing a basis for supporting their healthy lives. Over the past 5 years, the organization has extended its range of activities to enable foreign residents to access it more easily, and collaborated with groups supporting them in the vicinity to promote their activities. Conclusion The International Town Healthcare Room’s activities are developing as community-based healthcare programs, confirming the establishment of bases that contribute to the community.

P-06-04 stress and health status of Korean students: comparison with students in their home country.

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The number of foreign students studying in Japan is increasing and many foreign students seem to suffer from stresses. The number of South Korean students in Japan in 2015 fiscal year was 15,279 that was the fourth largest next to China, etc. The purpose of this study is to reveal the stress, health problems of the South Korean students in Japan by comparison with students in South Korea. The subjects were 147 students in South Korean university, 67 students from South Korea in Japanese university. In South Korea, students joined the study in classes, then questionnaire was distributed and collected. The
questions included the basic questions like birthday, sex, and questions to assess depression (CES-D), sufficiency of university life [SoULS-21 (Okuda et al. 2010)], dietary diversity questionnaire (FAO, 2010, 2013), and rapid assessment of physical activity (Univ. Washington, 2006). In Japan, the subjects, who officially belong to Japanese universities, were personally introduced via acquaintance. Questionnaire additionally included questions about overseas student life (Liang, 2014). Both students showed high Cronbach’s a coefficients for scores of CES-D, SoULS-21. The results of multiple regression analyses where dependent variable was score of SoULS-21 and independent variables were selected from all other variables revealed that CES-D had a significant negative effect on SoULS-21 in both students. After adjustment of effects of CES-D scores by analysis of covariance, SoULS-21 in Japan was significantly higher than that of students in South Korea. It was considered that there were other factors affecting on SoULS-21.

**P-06-05 Evaluation about the Quality of Life using EQ-5D for Japanese elderly long-stayers in Chiang Mai, Thailand**

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**Background**

Japanese elderly people prefer to stay in south-east Asian countries after their retirement because low cost of living and warm temperature. However some of them may have uncomfortable and/or anxieties because of food, language, and cultural differences. Thus we check their Quality of Life (QOL) using questionnaires.

**Methods**

Surveys were conducted for 108 people from Japanese elderly long-stayers clubs in Chiang Mai, Thailand during February 2016. Measurement contents were sociodemographic variables and QOL using EQ-5D-3L Japanese version from EuroQOL.

**Results**

Ninety-seven (89.8%) responded completely. Mean age was 69.5 ± 5.9 years old. Mostly (88%) went back to Japan at least one time/year (mean = 2.1 times/year). 67 people had one or more chronic diseases. Mean QOL utility index was 0.918 ± 0.140. Each age groups’ QOL utility indexes were as follows: age under 70 was 0.957 ± 0.105, age from 70-74 was 0.868 ± 0.161, age from 75-80 was 0.910 ± 0.139, age over 80 was 0.850 ± 0.066. The elderly having chronic diseases are significant lower score than the normal one (0.890 ± 0.154 vs. 0.980 ± 0.075, p<0.05).

**Discussions**

Compare with Japanese elderly who are living in Japan, average utility scores are better in each age groups. Generally speaking, Chiang Mai Long-stayers average QOL is better than Japanese elderly’s. Most Japanese long-stayers enjoy their stay in Chiang Mai, however some of them are extremely low score. We have to consider the support system to help the bad QOL people in Chiang Mai.
P-07-01 Quality of Life for Children at Lowland Papua New Guinea

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In the traditional society which the modernization goes ahead through, we often observed the changing of nutritional status caused by the change of quality of food, and the diversifying of socio-economic status caused by the cash economy. The diversification of socio-economic status affects the amount of consumption of the purchase crops, and the accessibility to the education opportunity for the children, and, as a result, it is accelerated to get non-homogeneity of the whole society. The social non-homogenization may affect the quality of life, in particular, for the children. It is interesting to clarify the strategy how people adapt themselves in the social environment change, that is socio-economic status. In that purpose, it is needed that we take the survey in societies that have various socio-economic conditions. In this study, our purpose is to evaluate the QOL, nutritional status, and the physical ability, and to examine the relationship of those. Gidra people living in the lowland Papua New Guinea remains a traditional lifestyle such as the slash and burn agriculture, the group hunting, and the consumption of the sago palm. In this study, we investigated the body measurement, physical test, and the measurement of QOL using PedsQL to the children. PedsQL is the measurement of QOL for children, and we used Generic Core Scale, which consisted of 23 questions for physical, emotional, social, and school. This measurement had been examined the validity and the reliability by many researchers. We discussed the relationship between QOL, and the other measurements.

P-07-02 Predictors and Lifestyle Behaviours Relating to Child Obesity in Urban Indonesia: Principal Component Analysis.

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Background. Obesity is the main cause of noncommunicable diseases. Child obesity is increasing globally and 83% are from the low- and middle-income countries. Thirty percent of Indonesian children (5 - 12 years) in capital region are obese or overweight and no prevention program has been implemented. This study aimed to identify the latent variables (components) of lifestyle behaviors and their predictors relating to child obesity in urban Indonesia. Methods. Self-developed 64 items (29 lifestyle behaviours and 35 predictors) questionnaire based on the qualitative study for 579 children (97.5% of response rate) aged 9 to 11 years from 5 elementary schools was conducted in 2015. Data was analyzed using principal component analysis with Promax rotation. Ethical considerations were approved by the Ethics Committee of the St. Luke’s International University. Results. Ten components (6 lifestyle behaviours and 5 predictors) were categorized and the Cronbach alpha coefficients were .70 and .68, respectively. Five components of lifestyle behaviors were: exercise preference, healthy diet, sleep and rest, exercise willingness, and fruit-vegetables preference (.57-.75). Another 5 components of predictors were: knowledge of obesity, social support, exercise safety, efficacy of controlling lifestyle, and family support (.50-.65). Conclusion. Although the reliability of each component was relatively low, categorized components showed moderate reliability of the questionnaire in total. Diversity of the participants’ obesity status and limited number of items of questionnaire might cause low Cronbach alpha. However, components of child obesity prevention in urban Indonesia were shown. Further studies such as structures among obesity status, lifestyle behaviours, and their predictors need to be examined.
P-07-03  Proportion of chronic malnutrition is dominant in male children in Kampong Cham province, Cambodia.

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Background: Child mortality in the world has been decreasing consistently. However, around 5.9 million children died in 2015 and 45% of them were with malnutrition. Malnutrition during ‘the first 1000 days’ crucially affects physical and mental development, performance at school and work in the long perspective. Cambodian Demographic and Health Survey in 2014 said 24% children under-five-years-old were underweight (low weight-for-age: WFA) and 32% were stunted (low height-for-age: HFA). To detect factors, which influence on the occurrence of child malnutrition, we launched a prospective cohort study in rural Cambodia. This is a report of our baseline survey in February-March 2016.

Methods: We measured weight and height of all 318 children under two-years old in Kpob Ta Gnoun commune, Steun Trung district, Kampong Cham province in Cambodia. Using the WHO Child Growth Standard, we described nutritional status for age (months) and sex.

Results: The average Z-score of WFA was -0.51 (0-5 months), -0.77 (6-11 months), -1.13 (12-17 months) and -1.21 (18-23 months). All averages Z-score for WFA, HFA, and WFH had significantly decreased from 0-5 months to 12-17 months and 18-23 months. Moreover, the average Z-score of WFA of boys had become significantly worse than girls after six months.

Conclusion: As previous studies reported, the significance of malnutrition had increased after six-month old. On the other hand, this is the first report in Cambodia about the different prevalence of chronic malnutrition by sex from around one-year old. We want to identify risk factors, which affect this fact in our follow-up cohort study from now.

P-07-04  A study concerning the nutrition of the children in a district in Afghanistan

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The socio-economical situation of a community influence the nutrition condition and the infection rate of the children. Afghanistan, a war-turn country for decades, faced a sever mal-nutrition condition in the children, and counted about 10% in 2002. Thereafter due to the efforts of the health staff based on the international cooperation this amount decreased to 6.3%. But the ISAF withdrawal and the related economic crises once again caused the increase of this item. In the suburb area of the Kandahar city where the “NGO Karez Health and Educational Services” operates, this number was 14.9% in 2010 and decreased up-to 6% by the effort of the local health workers. The recent economical crisis once again worsened the situation. The Karez did a survey to find out the basic element to be solved. Education of mothers may be more affective element for the solution of the problem.
P-07-05  Effect of intervention program on obesity among obese rural school children in Northeast China: A one year follow up study

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[Background] We conducted research in Northeast China from September to November, 2015 where 229 elementary school children aged 9-12 were found to be overweight/obese according to the BMI classification by Working Group on Obesity in China. These children were randomly assigned to four groups namely: control; exercise; nutrition education; and exercise & nutrition. After a 2 month intervention, the effect of exercise & nutrition was significantly greater than other groups. The current study is a follow up of the 2015 study, aimed at verifying its effects after 1 year. Based on the analysis of previous successful and unsuccessful cases, we will consider a long-term efficient intervention program for obesity.

[Methods] For the 2016 study, consent was requested from guardians alongside voluntary participation from the 229 elementary school children who participated in the intervention program in 2015. The survey included: 1) Anthropometry (height, weight, body fat, upper arm circumference and skinfold thickness); 2) Diet survey (questionnaire); 3) Physical activity survey (questionnaire); 4) Investigation of nutrition knowledge (questionnaire verifying the effect of nutrition education); and 5) Socioeconomic background of the household, nutrition and health awareness of parents (questionnaire).

[Expected outcome] Through this follow up study, we can determine whether the effects of the obesity intervention program were maintained. We will discuss the children's physical state immediately after the 2015 intervention and 1 year later, i.e., rebound, no weight change, increased obesity and/or weight loss; and analyze the reasons that result in each category, considering an effective long term intervention program for obesity.

P-07-06  The relationship between child health, nutritional status and mother’s awareness on hygiene in urban Indonesia

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[Introduction] In the urban slums of many developing countries, over population contributes to poor water and sanitation access. Approximately 300,000 children die from diarrheal diseases caused by unsafe drinking water and poor hygiene worldwide per year, stressing the importance of safe water and hygiene for children’s health. The study examines the relationship between child health, nutritional status and mother’s awareness on hygiene. [Outline] The study was conducted in households in the densely populated area of Bandung, West Java Province, Indonesia from August to September 2016. We explained the study to a women’s group and recruited participants who were open to home visits. During home visits, we interviewed mothers on household socioeconomic background, procurement and use of drinking water, domestic water use and drainage and awareness on hygiene. Information was also collected on children's growth record and health status. We further observed procurement and use of drinking water and domestic water, toilet use and handwashing behaviors. [Expected outcomes & Discussion] It is expected that mother’s hygiene awareness will be high. However, home sanitation facilities will not be adequate in many cases. A link is expected between poor home sanitation facilities and mother’s education and economic status levels. In cases where mothers have no interest in hygiene or live in poor sanitary conditions, children are expected to have a higher incidence of diarrhea and poor nutritional status. The
P-08-01  Enhance utilization and quality of health care services through introducing the PRESSMN model in the pilot units of the Kedougou District of Health in Senegal

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Introduction: In 2013, Senegal with the support of JICA has launched the PRESSMN model to strengthen maternal and newborn health care services in the prospects of scaling nationwide. This model includes 5 key elements which are community communication, concept sharing, work environment improvement through the 5S KAIZEN, maternal and newborn care practice evidence based and development support. The introduction of this model in the pilot units of the Kedougou district of health allowed them to increase utilization rate of maternal and child health services. Outline: In the selected units following activities were performed. That is, the identification of the gap in the quality of care, development of an action plan involving communities to decrease these gaps, providing training for health workers, implementing activities based on the PRESSMN model and monitoring and evaluating practices. Discussion: This model seems to have contributed to enhance utilization of health services through better communication with clients, improving the work environment, considering community thoughts, needs and dignity. Conclusion: This experience shows that the PRESSMN model is likely to be a reasonable way to help strengthening the community health system and enhance health services utilization.

P-08-02  Evaluation of humanized care in pilot maternities of Kolda in Senegal Health District between April 2014 and June 2016

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Introduction: In 2013, Senegal, supported by JICA, has decided to extend the project of reinforcing maternal and newborn health care experimented in the Tambacounda Region from 2009 to 2011. Enrollment of Kolda Health District has tracked changes in maternal and newborn health indicators. Process: The introduction of model involved the sharing concept, communication with communities, the quality approach 5S/Kaizen, support and development and practice of care. Every step was supported by specific activities targeting the identified categories of actors. A monitoring and evaluation of the practice of providers was introduced. Thus, improvements were noted in the use of antenatal care and postnatal care, and the number of births in structures. The mid-term evaluation study showed an improvement of useful care practices recommended by the World Health Organization. Discussion: Key factors could justify the success of the project implementation and improvement of indicators: the motivation of health care providers in a better working environment, the strong involvement of local authorities and health committees, enhancing availability qualified personnel in the structures and supervision of actors. Through communication with health workers and the general population, integration of humanized care in health...
facilities also made a success. However, the strengthening of qualified personnel and upgrading maternity services standards prove decisive for best practice humanized care. Conclusion: The experience of Kolda Health District shows that the introduction of humanized care in public health services in Senegal may improve attendance to structures even beyond maternity and contribute continuously to the reduction of maternal and newborn mortality.

P-08-03  Integrated maternal and newborn health care and services: A comprehensive project model in Senegal

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Introduction To improve maternal and newborn health, the Ministry of Health and Social Actions (MSAS) in partnership with the Japan International Cooperation Agency (JICA) is carrying out a project model (PRESSMN) for the purpose to increase utilization of health structures and quality of health care. Overview According to national health policy and vision, PRESSMN includes five components: 1) community participation, 2) project concept sharing, 3) improvement of health structures working environment, 4) humanized evidence-based health care practice, free choice delivery position, 5) sustainable activities related to health information system, health promotion. The implementation of PRESSMN has begun through a pilot study in the South-East of Senegal. After baseline study, interventions and end-line evaluation, the MSAS with support of JICA, has decided the scaling-up step by step in the 14 regions of the country by 2017. Discussion By carrying out PRESSMN, the MSAS has introduced the highlighted evidence and best practices of PRESSMN in national maternal and newborn health policy, norms and protocols. Moreover, PRESSMN health practice model has been introduced in curricula of obstetrics and gynecology specialization and in midwives/nurses training program. A mid-term review of the project in conducted in 2016. Conclusion Tremendous improvements, policy implications and innovative practices have been registered so far in the health system in Senegal.

P-08-04  PRESSMN extension in the health district of Koumpentoum: results, prospects

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Introduction In order to accelerate the achievement of MDGs, including 4 and 5, the Ministry of Health and Social Welfare of Senegal, in collaboration with JICA, has implemented a pilot project PRESSMN from 2009 to 2011 in Tambacounda region. Thus, an extension phase was conducted in five districts of the country, including Koumpentoum. Process At the health district Koumpentoum began with a situational analysis that gave results leading to the development of action plan. It was underpinned by good monitoring and evaluation system, allowed to observe improvements in the behavior of care providers, the working environment, the service utilization and contribution of communities to the health effort. Discussion Given the positive impact of PRESSMN on reproductive health indicators, the challenge today remains the consolidation of achievements, but especially sustainability. In fact, the results of mid-term
survey have shown improvement over the indicators, mostly the practice of prenatal care, Humanization of Childbirth care, and postnatal consultations. But it has shown otherwise the necessity of finding corrective strategies in order to be able to prevent the following problem of health staff turnover; really trained human resources being the keys for the project’s sustainability. Conclusion PRESSMN has shown that it is possible with reasonable and accessible resources to improve the quality of care for pregnant women. It would be of great interest to think about extending the PRESSMN across the country, but also to other services offered in health facilities, so that the quality of care becomes a reality for the benefit of all.

P-08-05  The cause and the place of the maternal death in the Central African Republic during a civil war.

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[Introduction] Central African Republic (CAR) of continued high maternal mortality rate 882 (UNICEF 2015). It is concern about the deterioration of the situation in a civil war starting in 2013. The purpose of this study is to clarify cause of maternal death and the place during a civil war. [Outline] Survey, in the capital Bangui in CAR, interviewed 10 families in April 2015 to January 2016. Survey items were birth place, age at the time of death, cause of death. The result, birth place 6 home group vs 4 hospital group, the average age at death 30.8 (SD9.87) vs 28.5 (SD7.85). Cause of death, in the home group were postpartum hemorrhage 3 people (one person laceration inside), postpartum infections/ pregnancy in tuberculosis/ HIV merger is each one, and in the hospital group were cervical laceration bleeding 3 people, ascites one person. [Discussion] 60% of the delivery location was a home birth. In the report of the CAR Ministry of Health, home delivery of 2004 was 9.9%. It has been an impact of the civil war. Maternal death was observed in both the home and hospital, then four people were bleeding due to cervical laceration. The CAR has a private therapy to promote the labor, the use of this therapy is a concern. [Conclusion] As support for the safety of birth, it is necessary to conduct education for private therapy and obstetric crisis bleeding.

P-08-06 Activities to Improve the Infant/Child Health Passport in the Republic of Malawi’s Mzimba Prefecture

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"Introduction" The health passport is a notebook used in activities to improve the health of children and mothers in Malawi. It contains monthly growth statistics as well as dates health services were received, and the data is presumed to be utilized as a feedback tool in field activities. However, its value has been diminished as data entered into the passport is often inaccurate. "Outline" In an effort to improve the passport’s reliability, the JOCV (Japan Overseas Cooperation Volunteers) investigated the extent of the inaccuracies. From February to April 2016 at 5 separate locations, JOCV members collected the health passports of all 577 participants from 6 months to 5 years. The data points they analyzed were missing and incorrect entries of vitamin A administration, age, and weight, counting weight errors that deviated more than 0.5kg. "Discussion" Approximately 40% of the health passports collected (230 out of 577) were missing vitamin A entries, 88% of passports for children between 2-5 years listed the
wrong age, and 97% contained weight errors. One underlying problem is thought to be a lack of training on correct use, while another culprit is the passport itself: the spaces to record age/weight are narrow, and the layout is less than logical. “Conclusion” Although the data recorded in the health passport is vital to field work, the lack of audit to ensure integrity is an obstacle. An important step in moving forward will be to raise awareness of the importance of collecting accurate data.

P-09-01 Lung function at preadolescence in low birthweight children in Bangladesh

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Background: Children with low birth weight are prone to frequent and serious episodes of respiratory illnesses. Immuno-programming during the period of fetal and early infancy has been reported to link with the development of asthma and other respiratory illnesses in later life. It is important to assess the effects of low birth weight on lung function and respiratory health. Objective: This study aimed to determine if low birth weight is associated with reduced lung function and respiratory health in school-age children. Methods: A cohort of 517 singleton newborns were followed from fetal period to at the age of 9 years in the MINIMat study, Bangladesh. Vital capacity (VC), forced vital capacity (FVC), and forced expiratory volume (FEV) were measured using a spirometer. Fetal growth was monitored and anthropometry was recorded at birth, monthly up to 12 months, 6-monthly up to 24 months, at the ages of 54 months and 9 years. Results: Mean (SD) age of the study children at measurement was 8.9 (0.1) years and 48% were males. A total of 24% (n=122) children were low birth weight. FVC (odds ratio=4.05 [1.31-12.54], p=0.015) and FEV (3.67 [1.17-11.50], p=0.026) were significantly different between low birth weight and normal birth weight children after adjusting for sex, age, height, gestational age at birth and maternal early pregnancy BMI. Conclusion: Children with low birth weight shows significantly lower lung function in Bangladesh.

P-09-02 The association between breastfeeding practice and children’s growth in suburban area of Northeast China

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Background: The World Health Organization endorses exclusive breastfeeding of infants for the first six months of life to achieve optimal growth, development and health. However, recent reports indicate that the rate of exclusive breastfeeding in China has been declining. With the recent end of China’s one-child policy, more couples are having a second baby. Whether the two-child policy would affect breastfeeding practice remains unknown. The study examined the current situation of breastfeeding practice, determining factors (socio-demographic attributes, psychosocial factors, healthcare/biomedical factors, community attributes, public policy) associated with breastfeeding practice and assessing the correlation between breastfeeding practice and children’s growth and nutritional status in Northeast China. Methods: A total of 80 pairs of women and their children from Benxi city in Northeast China were selected. Data
collected covered: 1) Anthropometric measurements of mothers (height, weight, body fat) and their children (height, weight, head and arm circumferences) aged between 6 months and 3 years. 2) Parents' social-demographic characteristics, knowledge, attitude and practices towards breastfeeding (questionnaire); and 3) Breastfeeding demonstration and observation during home visits (from 80 pairs, 30 breastfeeding women and their children were selected). Expected outcomes: It is expected that parents' social-demographic characteristics such as being primiparous or multiparous, maternal education level and occupation and family income will have an influence on breastfeeding practice; and that parents' knowledge and attitude towards breastfeeding will influence breastfeeding practices. Differences in children's growth and nutritional status resulting from different breastfeeding practice are also expected.

P-09-03 Outcome of newborn infants discharged from the neonatal care unit of National Maternal and Child Health Center (NMCHC), Cambodia (3rd report)

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Background: Every year, around 7000 neonates are born at NMCHC, which is a top referral hospital in Cambodia. About 10% of them need to admit to the neonatal care unit (NCU). After the critical stage, if they could start oral feeding, many of them discharge even though they are extremely or very low birth weight infants. Follow up system for them after discharge does not exist. This research aims to know the real situation of infants within one year after discharge from the NCU and to identify the factors, which determine their prognoses. Method: We interviewed their families, collected data from medical records, and had telephone interview to their families when infants became one, six and 12 months old. Result: From September 2014 to April 2015, total 219 newborn infants admitted to NCU and 175 survivors discharged. On 12 months old, 111 survived, 12 died and 52 were lost to follow up (LTF). 9 among 12 death cases occurred within one month after discharge. 110 infants at 12 months old had visited health facilities after discharge and 39 needed hospitalization. We are now analyzing data on factors, which affected their morbidity/hospitalization after discharge. Conclusion: Follow up by telephone interview had a limitation to collect enough data because of lots of LTF. But at least 111 among 135 discharged infants survived after one year. Establishment of follow-up and care system would be a future issue in Cambodia.

P-09-04 Comparison by caste of well-baby checkup data in Kaski District of Nepal

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Background: Pokhara is located in a mountainous region and many of its residents are Dalits or Hill Dalits, who face discrimination and exclusion under the caste system. The elucidation of an association between the caste system and malnutrition or obesity in infants is important for establishing a support system to prevent postnatal and childhood malnutrition and obesity in Nepal. Methods: Subjects were 2,217 infants who visited the Kaski District Public Health Center for a well-baby checkup. Data on their age, sex, weight, and caste were collected. Z-score values on the World Health Organization growth
chart were used to identify underweight and overweight infants. This study was approved by the University of Morinomiya Institutional Review Board for human research. Results: Among the 2,217 infants, 16.9% of the boys and 9.2% of the girls were underweight, with a weight-for-age Z-score at least -2SD below the WHO standard value. In addition, 5.2% of the boys and 5.7% of the girls were overweight, with a Z-score at least +2SD above the WHO standard value. Conclusion: Due to poverty and fewer educational opportunities, mothers from groups discriminated against under the caste system have a high risk of malnutrition and insufficient breast milk production. Mothers in the upper castes, who were able to purchase formulas could provide excess milk to infants, leading to over nutrition and obesity. Therefore, to prevent the occurrence of lifestyle diseases in the future, it is urgent to educate women in Nepal about the importance of maintaining the appropriate weights of infants.

P-09-05 Baseline Survey of Maternal and Child Health in Three Villages in Xaybouthong District, Khammouane Province, Lao PDR

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Background: Until recently, Xaybouthong district in Khammouane province had not received support for maternal and child health from any international organizations. ISAPH (International Support and Partnership for Health), a non-profit organization, became the first to initiate this support in three villages under the partnership with Khammouane provincial health office. Methods: The villages were targeted based on population and distance from health facilities, and a survey was conducted from September-October 2015. 99 of 234 mothers with children under 5 were selected, and interviews/questionnaires were used for data collection. The questionnaire inquired about areas thought to strongly relate to child nutritional status. Results: 23 (24.0%) of the 96 mothers surveyed had lost one or more child, and 9 of the 23 experienced multiple losses. There were 43 total child mortalities, 34 (86.0%) of whom were infants under 1 year, and 40 (93.0%) of whom died at home. 71 of the mothers (72.4%) were not aware of antenatal care and 74 (75.5%) delivered in their house. This tendency was seen among participants with multiple deliveries and little education. 94 had fed mokkao (steamed rice) to their child(ren) under 6 months to make the child stop crying. Conclusions: Although the infant death rate was a steep 29 per 1,000 live births, the leading cause of death was unclear as the majority of deaths occurred at home. We believe there is a link between child mortality and knowledge/behavior of their mothers, and immediate intervention is needed regarding suitable childcare and proper feeding practices.
<Background> The World Health Organization Office for the Western Pacific Region (WPRO) has developed the "Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014-2020)" to improve the quality of Early Essential Newborn Care (EENC) to reduce the neonatal mortality rate in the Region. In line with this Regional Action Plan, Lao People’s Democratic Republic has developed the National EENC Implementation Plan. Based on these plans, four National Tertiary Hospitals in Lao PDR are vigorously implementing EENC. However, the current EENC practices at these hospitals are not well documented yet. Therefore, the observational study was planned to understand the current EENC practices at these hospitals. <Methods> EENC is subdivided into 79 checkpoints referenced on the monitoring checklist developed by WPRO. Each checkpoint is rated using a 0-2 point scale. A percentage is calculated for each checkpoint as total scores divided by the possible maximum scores. <Results> The cares immediately after delivery such as “drying immediately and thoroughly”, “skin-to-skin”, and “delayed cord clamping” showed high percentages. The percentages for the cares before and after delivery were not as high. These cares include “handwashing”, “breastfeeding counsel”, “check mask and bag for newborn resuscitation” and “monitoring postpartum mothers and their newborn babies”. <Summary> The results were presented to the Ministry of Health, the National Tertiary Hospitals, and the WHO and actions to further improve EENC have been discussed among the stakeholders.

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Background: The Japan Disaster Relief Infectious Disease Team (JDR-IDT) was formulated in October, 2015. In December 2015, outbreak of yellow fever (YF) occurred in Angola, and spread to Democratic Republic of Congo (DRC). Domestic transmission of YF was confirmed near Kinshasa. The Government of DRC declared YF outbreak and requested international support in June, 2016. To respond to this request, JICA sent the first assessment team of JDR-IDT to DRC. Results: 1) The number of YF suspected cases was increasing. 2) Only INRB can examine YF by PCR and ELISA for IgM, however, INRB cannot do them since July due to lack of reagents. 3) DRC’s Ministry of Health (MOH) planned to start mass vaccine campaign in Kinshasa in August, however, delay of vaccine arrival and shortage of syringes could affect its start. 4) Vaccine dose will be reduced to one fifth of ordinary. 5) Some hospitals have YF treatment unit. 6) The activities for YF are lead by Department of Disease Control and National Immunization Program, MOH, however, the coordination with donors was weak. Discussion: There was neither
disaster management body nor usual treatment activity for disaster victims like natural disaster response. In infectious disease response, assessment team had to collect the information on needs of specialties, contents, areas, etc. to formulate JDR-IDT’s activities.

**Conclusion:** Assessment team recommended to JICA to send JDR-IDT, and their expected relief activities include: 1) preparation of vaccination campaign, 2) provision of laboratory reagents and technical support to INRB, 3) coordination support to MOH.

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**P-10-02 People with injury and disability caused by the Nepal Earthquake in April 2015: a investigation at one year after the disaster**

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A huge earthquake in 25th April 2015 and its epicenter struck Nepal. We, DOSANKO Community Health International as one of the non-profit organizations (NPO), has been managing temporary clinics and learning center for the earthquake refugees at refugee camps. To know how people with injury and disability caused by the earthquake live in post-earthquake, we interviewed three medical institutions and a non-government organization (NGO) at the time of about one year after the earthquake. Also, we investigated the people with injury and disability in some refugee camps. The only one specific rehabilitation center for spinal cord injury in Nepal treated about 150 cases of spinal cord injuries, and the cases with nearly complete paralysis were up to 40 % of cases. We also found some cases with spinal cord injury without experiencing specialized medication and cases with limb contracture even after simple fracture in refugee camps. National rehabilitation center had 40 cases with amputation, of which 7 cases could not return to their home village mainly due to the difficulty with life as disabled in their village. Hospital and Rehabilitation Center for Disabled Children newly found nearly 300 of people with disability at refugee camps in 7 districts. Refugee camps were luck of care for the people with disability who also were difficult to get new houses for them. There are the people with injured and disability living in the rural community out of statistics and proper medications.

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**P-10-03 Study on social support, mental health status among victims of 2015 Nepal Earthquake in Kavrepalanchok, Nepal**

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**[Background]** On 25th April 2015, great earthquake attacked wide area of Nepal. Many of victims still lived in temporary housing after six months. **[Methods]** We carried out a cross-sectional study with structured questionnaire in November 2015 supported by Love Green Japan (International NGO) in Devital Village, Kavrepalanchok, Nepal. We used Kessler 6 (K6) to measure depression level, and Impact of Event Scale- Revised (IES-R) to identify psychological stress. We adopted chi-square test, multivariate linear regression analysis to identify associated factors. We used SPSS for windows ver.23.0 for statistical analysis. Significance level was at p<0.05. **[Results]** In total, 233 victims participated (Male: 121, Female: 112). Average age was 38.6 (SD: 13.9) years old. Mean school education was 3.1 (SD:
4.0) yrs, however, 48.7% had no school education. Mean monthly income was 76.1USD (=8,143RP). Of the total, 96% lost their houses, 98% replied no support from the community, relatives, neighbors nor government. Majority lived temporary accommodations (tent: 46.4%+ temporary housing 43.8%). Among victims, 88% had >15point score in K6 test (Cronbach α=0.871), 94% had >25 points score in IES-R test (Cronbach α=0.947). Good relations with neighbors (β=-0.121, p=0.039), monthly income (β=-0.098, p<0.0001) were negatively associated with IES-R score. Female (β=0.245, p<0.0001), unsatisfactory for the life (β=0.340, p<0.0001) were positively associated. As for the Happiness Score, however, 67.5% replied “I am satisfied with my life”【Conclusion】To mitigate damage for the next disaster, official support, community support should be also emphasized in Nepal.