Moving Toward Universal Health Coverage: Strengthening Quality of Care
Welcome Address

Conference Program at a Glance

Keynote Speakers and Abstracts

Oral Presentation Program
  Oral Presentation 1
  Oral Presentation 2
  Oral Presentation 3
  Oral Presentation 4

Poster Presentations
  Poster Presentation Day1
  Poster Presentation Day2

Concurrent Meetings

Committee Members

Reviewers List

Acknowledgement

Abstract Index
Welcome to Phnom Penh!
On behalf of the Ministry of Health and the steering committee of the 8th International Conference on Public Health among Greater Mekong Sub-region countries, I would like to welcome you to the Kingdom of Cambodia and to the conference. I would also like to take this opportunity to warmly welcome and thank all the deans of public health institutions who have actively contributed to the preparation of this event.

The 8th International conference is held from the 5th to the 6th of November 2016 in Phnom Penh. The conference theme is "Moving towards Universal Health Coverage: Strengthening Quality of Care". This conference will be used as a platform to share research findings on burden of communicable and non-communicable diseases, determinants of health, health promotion interventions, quality and access to health services and universal health coverage. It is also a forum to promote public health work and to provide opportunities to students and faculty members in the region to meet and share their views and interests.

You may have already realized that the conference venue is located on the bank of the Mekong River. This location is unique. It is at the junction of the Mekong river and two other main rivers—the Tonle Sab and the Bassac. Having the conference here serves as a reminder that we are all connected by this mighty river and I strongly believe that the conference will help further strengthen collaborations across all countries in the Greater Mekong Sub-region and especially across the different public health institutions represented in this conference.

Once again, it is my pleasure to welcome you all to the conference and thank for your contribution and participation. I hope that all of you will have a pleasant stay while in Phnom Penh.

As the host of the 8th International Conference on Public Health among Greater Mekong Sub-region countries, I would like to warmly welcome you to Phnom Penh, the Capital city of the Kingdom of Cambodia. It is a great honor for the National Institute of Public Health, and especially the School of Public Health, to host this conference. Organizing this event would not have been possible without technical support from the deans of public health schools who are members of the GMS Public Health Academic Institution network. In addition, we also received financial support from the China Medical Board and other support from KHANA, University of Health Science, and the Cambodia Development Research Institute and from other development partners.

This conference is designed to provide not only a platform for sharing research findings and other public health works in the region, but also for learning more on the progress of universal health coverage (UHC) in the sustainable development framework and for sharing experiences on progress towards UHC from different countries. I hope you will gain a great deal of knowledge from our distinguished keynote speakers and from the numerous oral presentations and poster exhibitions.

In addition, as the Public Health career path is not widely recognized in Cambodia, I strongly hope that this international conference on public health will help raise awareness about the importance of public health in health promotion and in ensuring health equity as well as increasing the visibility of public health professionals in Cambodia and in the region.

I would like to recommend that you take some of your free time to explore this lively city or visit various world heritage sites in Siem Reap province, taste local foods, and relax and enjoy Cambodian hospitality. Once again, I thank you all for participating in this conference and wish that you have a memorable stay in Cambodia.
## Conference Program

The 8th International Conference on Public Health among GMS Countries  

*Moving toward the Universal Health Coverage: Strengthening Quality of Care*  

**SOKHA HOTEL, PHNOM PENH CAMBODIA**  

**November 05 -06, 2016**

### Day1: 5th November, 2016

#### Registration and Opening Ceremony  

**Time:** 7:00 – 08:00  
**Room:** Ball Room

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>07:30- 08:15</td>
<td>Arrival of the delegates</td>
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<tr>
<td>08:15- 08:20</td>
<td>Welcome remark &amp; introduction about the conference</td>
<td>Assoc. Prof. Chhea Chhorvann, NIPH Director</td>
</tr>
<tr>
<td>08:20- 08:30</td>
<td>Opening remark</td>
<td>H.E. Dr. Mam Bun Heng, Minister of Health</td>
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#### Plenary Session 1  

**Time:** 09:00 – 10:30  
**Room:** Ball Room  

**Moderator:** Dr. Robert Newman, Country Director, U.S Centers for Disease Control and Prevention  
(Cambodia)

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>09:00– 09:30</td>
<td>Agenda 2030: from MDGs to UHC and SDGs</td>
<td>Dr. Vivian Lin</td>
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<tr>
<td></td>
<td></td>
<td>Director of Health Systems Division of the WHO Western Pacific Regional Office</td>
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<tr>
<td>09:30– 10.00</td>
<td>Academic Institution: How to Achieve UHC: Global Lessons</td>
<td>Prof. Werner Soors</td>
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<td></td>
<td></td>
<td>Institute of Tropical Medicine (ITM), Antwerp, Belgium</td>
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<tr>
<td>10:00 – 10:30</td>
<td>MOH Cambodia: UHC in Cambodian Health Policy and Health Strategic Plan</td>
<td>Dr. Lo Veasna Kiry</td>
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<td>Director of Department of Planning and Health Information Department, MoH Cambodia</td>
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</table>
Coffee Break
Time: 10:30 – 11:00

Parallel Session: Oral Presentation 1
Track: Burden of Diseases, Communicable Diseases 1
Room: Ball Room
Time: 11:00 – 12:30

Chair: Assoc. Prof. Wongsa Laohaistrwong
Khon Kaen University, Thailand
Co-Chair: Prof. Cai Le
Kunming Medical University, China

Track: Public Health Intervention 1
Room: Champei
Time: 11:00 – 12:30

Chair: Prof. Nay Soe Muang
University of Public Health, Myanmar
Co-Chair: Dr. Wilawun Chada
Mahasarakham University, Thailand

Track: Universal Health Coverage 1
Room: Nakry
Time: 11:00 – 12:30

Chair: Prof. Wittaya Yoosook
Mahasarakham University, Thailand
Co-Chair: Dr. Kim Keovathanak
Public Health Department University of Health Sciences, Cambodia

Track: Health Promotion 1
Room: Kravann
Time: 11:00 – 12:30

Chair: Prof. Chaityuth Chavalitnithikal
Thammasat University, Thailand
Co-Chair: Assist. Prof. Chan Sodara
Public Health Specialist, US CDC Office, Cambodia

Lunch Break
Time: 12:30 – 13:30

Poster Exhibition 1
Time: 13:30 – 14:00
Room: Exhibition Hall (in front of Ball Room)

Plenary Session 2
Time: 14:00 – 15:30
Room: Ball Room
Moderator: Dr. Momoe Takeuchi, WHO Technical Officer, Cambodia

Example how QoC contributes to the success of UHC in Thailand
Assoc. Prof. Jiruth Sriratanaban
Department of Preventive and Social Medicine,
Director of Thailand Research Center for Health Service Systems, Chulalongkorn University

Panelist:
Assoc. Prof. Jiruth Sriratanaban, Thailand
Assoc. Prof. Chheng Kannarath, Deputy Director, NIPH, Cambodia
Prof. Chia Kee Seng, Dean of Saw Swee Hock School of Public Health, National University of Singapore
Dr. Sylvia Sax, Quality of Health Care from Heidelberg University, Germany

Moderator: Prof. Supa Pengpid, Director ASEAN Institute for Health Development, Mahidol University

Health Impact Assessment (HIA) as Key Strategy for Health in all Policies
Dr. Wiput Poolcharoen (Chair, HIA Commission, Thailand)

Coffee Break
Time: 15:30 – 16:00
Parallel Session: Oral Presentation 2

Track: Communicable Diseases 2
Room: Ball room
Time: 16:00 – 17:30

Chair: Prof. Wattasit Siriwong
Chulalongkorn University, Thailand
Co-Chair: Assoc. Prof. Lek Dy Soley
National Center for Malaria and School of Public Health, Cambodia

Track: Health Promotion 2
Room: Champei
Time: 16:00 – 17:30

Chair: Prof. Chia Kee Seng
National University of Singapore, Singapore
Co-Chair: Assist. Prof. Seng Sopheap
University of Health Sciences and School of Public Health, Cambodia

Track: Universal Health Coverage 2
Room: Nakry
Time: 16:00 – 17:30

Chair: Prof. Dr. Sathirakorn Pongpanich
Chulalongkorn University, Thailand
Co-Chair: Dr. Bernd Appelt
Social Health Protection, GIZ, Cambodia

Track: Health Promotion 3
Room: Kravann
Time: 16:00 – 17:30

Chair: Assist. Prof. Koeut Pichenda
National Center for Tuberculosis and School of Public Health, Cambodia
Co-Chair: Dr. Leang Supheap
School of Public Health, National Institute of Public Health, Cambodia

Day 2: November 06, 2016

Plenary Session 3
Time: 09:00 – 10:30
Room: Ball Room

Moderator: Prof. Vasuton Tanvatanakul, Dean of Faculty of Public Health, Burapha University

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 - 09:30</td>
<td>Transforming Research findings into health policy</td>
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<tr>
<td>Dr. Robert Newman</td>
<td>Country Director, U.S Centers for Disease Control and Prevention (Cambodia)</td>
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<tr>
<td>09:30 - 10.00</td>
<td>Public Health Education &amp; Quality of Care</td>
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<tr>
<td>Prof. Chhem Rethy</td>
<td>Executive Director CDRI, Cambodia</td>
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<tr>
<td>10:00 - 10:30</td>
<td>UHC in Cambodia - Current achievement and future challenges</td>
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<tr>
<td>Assist. Prof. Ir Por</td>
<td>Head of Health System Development Support Unit (NIPH) and School of Public Health, Cambodia</td>
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Coffee Break
Time: 10:30 – 11:00
## Parallel Session: Oral Presentation 3

<table>
<thead>
<tr>
<th>Track: Non-Communicable Diseases 1</th>
<th>Room: Ball room</th>
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<tbody>
<tr>
<td>Chair: Assoc. Prof. Prayoon Fongsatitkul</td>
<td>Faculty of Public Health, Mahidol University, Thailand</td>
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<td>Time: 11:00 – 12:30</td>
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<thead>
<tr>
<th>Track: Health Promotion 4</th>
<th>Room: Champei</th>
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<tbody>
<tr>
<td>Chair: Assoc. Prof. Dr. Phitaya Charupoonphol</td>
<td>Mahidol University, Thailand</td>
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<tr>
<td>Co-Chair Dr. Alongkone Phengsavanh</td>
<td>University of Health Sciences, Laos PDR</td>
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<tr>
<td>Time: 11:00 – 12:30</td>
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<table>
<thead>
<tr>
<th>Track: Universal Health Coverage 3</th>
<th>Room: Nakry</th>
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<tbody>
<tr>
<td>Chair: Dr. Jacobs Bart</td>
<td>Social Health Protection, GIZ Cambodia</td>
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<tr>
<td>Co-Chair Assist. Prof. Sok Kanha</td>
<td>Department of Planning and Health Information and School of Public Health, Cambodia</td>
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<td>Time: 11:00 – 12:30</td>
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<thead>
<tr>
<th>Track: Non-Communicable Disease 2</th>
<th>Room: Kravann</th>
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<tbody>
<tr>
<td>Chair: Prof. Li Yan</td>
<td>Kunmin Medical University, China</td>
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<tr>
<td>Co-Chair Assist. Prof. Cui Haixia</td>
<td>School of Public Health and University of Health Sciences, Cambodia</td>
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<td>Time: 11:00 – 12:30</td>
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## Lunch Break

**Time:** 12:30 – 13:30

**Room:** Exhibition Hall (in front of Ball Room)

## Poster Exhibition 2

**Time:** 13:30 – 14:00

**Room:** Exhibition Hall (in front of Ball Room)

## Parallel Session: Oral Presentation 4

<table>
<thead>
<tr>
<th>Track: Non-Communicable Diseases 3</th>
<th>Room: Ball room</th>
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<tbody>
<tr>
<td>Chair: Prof. Vanphanom Sychareun</td>
<td>University of Health Sciences, Lao PDR</td>
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<tr>
<td>Co-Chair Dr. Yi Siyan</td>
<td>Center for Health and Population Research, KHANA, Cambodia</td>
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<td>Time: 14:00 – 15:15</td>
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<thead>
<tr>
<th>Track: Public Health Intervention 3</th>
<th>Room: Champei</th>
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<tbody>
<tr>
<td>Chair: Prof. Nay Soe Muang</td>
<td>University of Public Health, Myanmar</td>
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<tr>
<td>Co-Chair Assoc. Prof. Dr. Tanongsaik Yinratanasuk</td>
<td>Burapha University, Thailand</td>
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<td>Time: 14:00 – 15:15</td>
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<tr>
<th>Track: Health Determinant 1</th>
<th>Room: Nakry</th>
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<tr>
<td>Chair: Assoc. Prof. Vo Van Thang</td>
<td>Hue University of Medicine and Pharmacy, Vietnam</td>
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<tr>
<td>Co-Chair Prof. Dr. Khay Mar Mya</td>
<td>University of Public Health, Myanmar</td>
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<td>Time: 14:00 – 15:15</td>
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<thead>
<tr>
<th>Track: Health Determinant 2</th>
<th>Room: Kravann</th>
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<tbody>
<tr>
<td>Chair: Assoc. Prof. Twisuk Punpeng</td>
<td>Thammasat University, Thailand</td>
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<tr>
<td>Co-Chair Assist. Prof. Ly Vanthy</td>
<td>US-CDC, Cambodia office</td>
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<td>Time: 14:00 – 15:15</td>
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</table>
Coffee Break
Time: 15:15 – 15:45
Room: Ball Room

Conference Wrap-up, Awarding Ceremony and Closing Ceremony
Time: 15:45 – 16:45
Room: Ball Room

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<th>Time</th>
<th>Event</th>
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<tr>
<td>15:45-16:15</td>
<td>Conference Wrap-up and Awarding Ceremony, Next Conference Announcement</td>
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<tr>
<td>16:15-16:45</td>
<td>Closing Ceremony</td>
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<td>Assoc. Prof. Chhea Chhorvann, NIPH Director</td>
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Concurrent Meeting Schedule
Day 1: November 05, 2016

**Concurrent Meeting 1**
Time: 11:00 – 12:30
Room: Malis Routh
Moderator: Julie King, Dr. Mark King, Dr. Niki Edwards, Queensland University of Technology, Australia
Sarim Cheang, Sophie Coelho, Anita Pearson, Handicap International, Cambodia

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<th>Time</th>
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<tbody>
<tr>
<td>11:00 - 12:30</td>
<td>Advocacy and health at the crossroads: Enhancing mobility-related health needs using the Journey Access Tool (JAT)</td>
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**Concurrent Meeting 2**
Time: 09:30 – 12:30
Room: Rom Chung
Moderator: HIA Commission, Thailand

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<th>Time</th>
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<tr>
<td>09:30 - 12:30</td>
<td>Close Meeting on the 1st Scientific Meeting on the 2nd ASEAN Conference on Health Impact Assessment (HIA) under the Theme of “Health Impact Assessment: Toward ASEAN Engagement and Sustainable Development” April 20th – 21st, 2017 in Hue, Vietnam</td>
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**Concurrent Meeting 3**
Time: 16:00 – 17:30
Room: Malis Routh
Moderator: Dr. Jacobus Koot, Team Leader Supporting Public Health Institute Program (SHIP), EU

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<th>Time</th>
<th>Event</th>
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<tr>
<td>16:00 - 17:30</td>
<td>Research and Policy for UHC in the Greater Mekong Sub-Region Countries</td>
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<td>Presenter 1: Prof. Nay Soe Maung, University of Public Health, Myanmar</td>
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<td>Presenter 2: Dr. Vanphanom Sychareun, University of Health Sciences, Lao PDR</td>
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### Concurrent Meeting Schedule

**Day 2: November 06, 2016**

#### Concurrent Meeting 4

**Time:** 13:00 – 16:00  
**Room:** Rom Chung

**Health Impact Assessment in the Policy, Program, Project Levels Mekong Sub-Region**  
Organized by National Health Commission Office (NHCO), HIA Commission and HIA Consortium, Thailand

**Moderator:** NHCO and HIA team, Thailand

**Part 1: Collaboration Case Studies on HIA (90 min)**

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>13:00 - 14:30</td>
<td>Health Impact Assessment of Trans-Pacific Partnership (TPP): Case Study from Thailand and Hue Vietnam</td>
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<td><strong>Dr. Nusaraporn Ketsomboon</strong>, Khon Khan University and HIA Commission, Thailand</td>
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<td><strong>Assoc. Prof. Tran Huu Dung</strong>, Vice-Dean of Pharmacy Faculty, Hue University of Medicine and Pharmacy, Vietnam (Tentative)</td>
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<tr>
<th>13:00 - 14:30</th>
<th>Health Impact Assessment of Dangue Hemorrhagic Fever Control Strategy</th>
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<tr>
<td></td>
<td><strong>Dr. Wiput Phoolcharoen</strong>, Chair of HIA Commission, Thailand</td>
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<td><strong>Dr. Nguyen Van Hoa</strong>, Senior Lecturer, Vice Dean, Head of Department of Epidemiology, Faculty of Public Health, Hue University of Medicine and Pharmacy</td>
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<tr>
<th>14:30 - 16:00</th>
<th>Health Impact Assessment of Public Policies (No.2) and HIA in Gross National Happiness (GNH) case study from Bhutan</th>
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<tbody>
<tr>
<td></td>
<td><strong>Thailand’s rules and procedures for the Health Impact Assessment of Public Policies (No.2) and HIA in Gross National Happiness (GNH) case study from Bhutan</strong></td>
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<td><strong>Dr. Decharat Sukkumnoed</strong>, Kasetsart University and HIA Commission, Thailand</td>
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**Part 2: Enhance HIA Development in GMS (90 min)**

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<th>Time</th>
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<tr>
<td>14:30 - 16:00</td>
<td>The conference committee and organizers reserve the right to change the conference program when necessary.</td>
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**Dr. Wiput Phoolcharoen**, Chair of HIA Commission, Thailand  
**Prof. Dr. Wongsa Laohasiriwong**, Faculty of Public Health, Khon Kaen University (Tentative)  
**Dr. Susann Roth**, Senior Social Development Specialist, Sustainable Development and Climate Change Department, ADB (Tentative)
Dr. Vivian Lin – Biography
Director, Health Systems, World Health Organization Regional Office for the Western Pacific

Responsible for the Division of Health Systems at the regional office and for technical support to countries and WHO country offices in a wide range of health system issues, including universal health coverage, health policy and planning, health financing, health workforce, health information systems, health system research, pharmaceuticals, medical technologies, traditional medicine, service delivery and quality, health law and regulation, and community engagement. Cross-cutting issues covered in the division include sustainable development goals, social determinants of health, equity, human rights and gender.

Experience:
Dr. Vivian has more than 30 years’ experience in health policy and program development, health planning, and public health teaching and research. She was previously Professor of Public Health and Head of the School of Public Health at La Trobe University, in Melbourne, and is the author of several leading public health textbooks in Australia and numerous articles on health issues in Australia, China, and globally. Vivian has also worked at senior levels in health policy in several Australian jurisdictions and in intergovernmental relations, including as Executive Officer of the National Public Health Partnership. She has also consulted widely for the World Bank, UK Dept for International Development, AusAID as well as the WHO, and served on multiple academic, government, community and editorial boards.

Education:
• Doctorate of Public Health, UC Berkeley, USA, 1986
• M.P.H., UC Berkeley, USA, 1979
• B.A., Yale University, New Haven, CT, USA, 1977

Agenda 2030: from MDGs to UHC and SDGs
Vivian Lin
Director, Health Systems Division, WHO (Western Pacific Regional Office)

The transition in 2015 from the Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) signalled a shift in global development – from a focus on specific human development target to recognition of the inter-relatedness of social and economic development. With this holistic approach, there is also an explicit focus on equity. From a public health perspective, the SDGs represent a commitment to action on social determinants of health.

For the health sector, universal health coverage (UHC) represents the platform for achieving the health-related goals of SDGs. To achieve equitable and sustainable health outcomes, health systems must offer quality, be efficient, address equity, demonstrate accountability, and ensure resilience and sustainability. An integrated and flexible approach to financing and service delivery, built on the foundation of primary health care, is at the core of system design and funding flows. Countries across the region, including the Greater Mekong Subregion, will necessarily chart their own roadmaps, in accordance with the localization of SDGs. However, there is need for priority attention to be given to a strong framework to ensure equitable access to quality services through aligning of regulatory and financial incentives across both public and private sectors.

UHC, however, is concerned with both individual and population health services. To act on the social determinants of health will require some shifts in ways of working. This includes strengthening the equity focus in each health program, investing in prevention, securing partnerships in public policy, engaging new stakeholders such as parliamentarians and academia, involving affected communities in policy development and implementation, building a transparent and participatory process in monitoring progress and outcomes. To do so also requires some new skills in the health sector, in order to broaden the intelligence base, to influence policy agendas, and to institutionalise new capabilities in the next generation of the health professionals and managers.
Prof. Werner Soors, MD., MPH  
Research Associate, Department of Public Health, Institute of Tropical Medicine (ITM), Antwerp, Belgium

Dr. Werner Soors is research associate at the Department of Public Health, Institute of Tropical Medicine (ITM), Antwerp, Belgium. After having graduated as medical doctor from Antwerp University (1986), with a postgraduate in tropical medicine and international health from ITM (1987), he worked for 16 years in primary health care in Nicaragua (Central America) before returning to ITM and embarking on a research and teaching career. Starting off with a master degree in public health (2004), he entered the unit of health financing led by Prof. Bart Criel, with whom he contributed to widen the scope of research from community health insurance to social protection in health, and ultimately to equity in health. Within ITM’s renowned postgraduate and masters’ courses, he introduced the subjects of social determinants and health-in-all policies.

Over the years, Dr. Soors participated in a range of multi-partner research initiatives (among them HEPVIC, ‘Health policy making in Vietnam, India and China’, 2005-2009, and Health Inc, ‘Socially inclusive healthcare financing in West Africa and India, 2011-2014) and international forums on universal health coverage (among them the 2012 EPHP conference ‘Strengthening health systems to achieve UHC’ in Bangalore and the 2014 AfHEA conference ‘The post-2015 Africa health agenda and UHC’). His conceptual approach to UHC combines a political economy approach with a profound commitment to health equity. Earlier this year he authored P4H first Knowledge-Learning-Innovation brief ‘Towards universal coverage in the majority world: the cases of Bangladesh, Cambodia, Kenya and Tanzania’.

Academic Perspective: How to achieve the Universal Health Coverage

Werner Soors  
Research Associate, Department of Public Health, Institute of Tropical Medicine (ITM), Antwerp, Belgium

Based on literature review and empirical research carried out by the Equity & Health Unit of the Institute of Tropical Medicine (Antwerp) in a range of low- and middle-income countries, Werner Soors presents an overview of lessons learnt for progress on universal health coverage (UHC). He thereby focuses on the interplay between political economy and technical solutions in successful universal health coverage (UHC) reforms, and the key role of equitable design and practice. A practical research tool is proposed that can help policymakers and implementers to monitor and evaluate equitable progress on the path to UHC.
Dr. Veasna Kiry Lo
Director of Planning and Health Information Department
Ministry of Health, Cambodia

Lo Veasnakiry graduated as Medical Doctor from the University of Health Sciences in Cambodia in 1989, and then he worked as Assistant-Surgeon in a National Hospital in Phnom Penh until 1993, and afterwards moved to work at the Ministry of Health as Planning Officer. In 1996, he earned the Master Degree of Arts in Health Management, Planning and Policy from the University of Leeds in the United Kingdom. Dr. Kiry has taken over the current position as Director of Department of Planning & Health Information since 2005.

As a public health policy planner, Dr Kiry’s main responsibility includes executive management and maintenance of the national health policy, strategic planning including monitoring and evaluation, and health financing in the Cambodian health sector, providing technical inputs for the development of sub-sector strategic plans, development of technical guidelines to support the implementation of sector policy and plans, and active engagement in sector-wide coordination and partnership.

Dr. Kiry has a long and strong professional working relationship with the government agencies and development partners, as well as international and national NGOs active in health in the overall context of health system strengthening and under a challenging environment of harmonization and alignment at both national and sub-national levels in Cambodia. He has been a member of the Cambodian National Social Security Funds Board and joined a number of inter-ministerial working groups. Dr. Kiry has been involved as one of the main players who took the position for Health Sector Support Program Phase I-II which had been financed by AFD, AusAID, BTC, DFID, UNFPA, UNICEF and the World Bank.

Furthermore, Dr. Kiry has experience in academic teaching as a visiting lecturer on health policy and planning at the Royal School of Administration and the National Institute of Public Health and Research. He also has extensive experience in attending regional and international conferences and other high level official meetings.

Assoc. Prof. Jiruth Sriratanaban, M.D., Ph.D.

Dr. Sriratanaban was graduated from the Faculty of Medicine, Chulalongkorn University with first-class honor, and board-certified in preventive medicine. He has an MBA—major in finance and marketing—from Sasin Graduate Institute of Business Administration, and a Ph.D. in Health care organization and financing from Johns Hopkins University in health care organization and financing. He is currently working at the Department of Preventive and Social Medicine, Faculty of Medicine, Chulalongkorn University in Bangkok, Thailand. He is also the Director of the Thailand Research Center for Health Service System, which was established as the joint research collaboration between the Faculty of Medicine, Chulalongkorn University, the Health Systems Research Institute (HSRI), and the Institute for Healthcare Accreditation (HA) in Thailand.

Dr. Sriratanaban has wide range of experiences in health system research and management, including more than 30 pieces of research studies and reviews in the areas of health service systems, hospital quality management, and universal health coverage (UC). He was on the HSRI taskforce in developing the Thai universal coverage policies, and was an editor of the report. He took active roles in the UC evaluation program under HSRI for many years, including developing a proposal for the master plan for managing quality under the National Health Security Scheme. Dr. Sriratanaban used to serve on the Medical Board of the Social Security Scheme from 2008-2012, and worked in many initiatives in reforming the Civil Servant Medical Benefit Scheme in Thailand. Currently, he chairs the Thailand Hospital Indicator Project (THIP) of the HA institute, and is also in the Prime-Minister’s Public Health Reform Subcommittee on Health Sector Financing and Health Security Schemes.

In addition, Dr. Sriratanaban has been on the Performance Negotiation Committee of the Office of The Public Sector Development Commission for the Ministry of Public Health (MOPH) and Bangpae Hospital (Autonomous public hospital) for more than 10 years. Furthermore, he was appointed as the Assistant Director of King Chulalongkorn Memorial Hospital of the Thai Red Cross (KCMH)—the 1,500-bed university-affiliated medical center in Bangkok—from 1999 to 2007, the Assistant to the President of Chulalongkorn University from 2008 to 2011, and the Deputy Director, Strategy and Quality Improvement Affairs, of KCMH from 2011 to 2015, during which the hospital won the Thailand Quality Class (TQC) Award in 2013. Since 2009, he has been a lead assessor of the Thailand Quality Award program—the Baldrige National Quality Program equivalent in Thailand—and a member of the technical subcommittee of the program in 2015.
Examples on how quality of care contributes to the success of UHC in Thailand

Jiruth Sriratanaban, M.D., Ph.D.
Associate Professor, Department of Preventive and Social Medicine, and
Director, Thailand Research Center for Health Service Systems.
Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Having access to good quality health services for everyone without suffering financial hardship is key to universal health coverage (UHC). Quality of care (QoC), therefore, plays critical roles in the success of UHC in Thailand. Firstly, QoC is the essential part for achieving effective coverage. Quality of health care delivery is recognized as the bridge between healthcare coverage and access, and population health outcomes. While the Universal Coverage Scheme (UCS) has adopted closed-ended provider payment mechanisms aiming for higher efficiency and cost containment, the National Health Security Office (NHSO) who is the biggest purchasers among the three health security schemes of the country has applied a number of initiatives to promote QoC. Some examples included central purchasing for some essential drugs and selective contracting to ensure accessibility to standard medicine and surgical procedures. Many forms of disease management programs based on cost-effective clinical practice guidelines and many pay-for-performance (P4P) arrangements focusing on key quality indicators have been introduced and expanded since 2003. These approximately accounted for 15 percent of the annual UCS budget in 2016. In addition, the NHSO conducted annual surveys on patient satisfaction and reported some health-outcome results to the public. As structured by the National Health Security Act, the UCS has a separated board responsible for quality control, in addition to the National Health Security Board.

Furthermore, the emphasis on QoC in UHC has included promotion of the Hospital Accreditation (HA) program by HA support budget for hospitals in UCS and additional capitation payment in the Social Security Scheme (SSS). Run by the Institute for Healthcare Accreditation (Public Organization), the Thai HA program encourages participating providers to comply with optimal sets of healthcare standards and to have capability for continuous improvement. Quality improvement systems and culture instituted in hospitals enable organizational learning and adaptability of providers to the new healthcare environment demanding for higher efficiency and accountability. The study on provider responses to the UCS initiatives in the series on UCS 10-year evaluation in Thailand [1] documented many organizational changes necessary for hospitals to be successful under the UCS context, including expanding services to cope with increasing demand, promoting use of generic drugs, as well as setting up primary care networks and patient referral.

Most recently, the Public Health Reform Subcommittee on Health Sector Financing and Health Security Schemes, appointed by the Prime Minister, is working on a set of strategies to use quality improvement in healthcare to improve UHC resource efficiency and support sustainability of the UHC schemes in Thailand.

Reference:

Dr. Wiput Phoolcharoen.
Chair, HIA Commission, Thailand

Dr. Wiput Phoolcharoen is the chairman of Health Impact Assessment Commission of Thailand or HIA Commission from 2009 until now. The HIA Commission was appointed by National Health Commission of Thailand, which is chaired by the Prime Minister and the secretaries is National Health Commission Office (NHCO), Thailand.

His work is aimed to develop the system, mechanism and knowhow of HIA in Thailand and regional country level for advocate HIA as the key strategic Health in All Policies (HiAP) and develop capacity building concept for relevant sector such as community, business academic for HIA process as the way forward to move to the ultimate goal of HIA as a participatory learning process.

He is also the leader of ASEAN on focal point on HIA which adopted by the senior Officials Meeting on Health Development (SOMHD) of ASEAN and his working in ASEAN and Mekong sub region level is focusing on HIA and Trans-Pacific Partnership and Dengue control strategy.
HIA as Key Strategy for Health in all Policies

The constitution of the World Health Organisation (WHO) considers health broadly and states that “health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. This has challenged that health at the individual and population levels is shaped by a combination of genetic, behavioural, social, economic, political, and environmental factors. Accordingly, the root causes or determinants of health include the quality and accessibility of infrastructure, such as housing, schools, parks, and transportation systems; the safety of the environment and economic security; the number and quality of social interactions; cultural characteristics, such as diet; and the level of equity and social inclusion. It is therefore essential that those many determinants be considered in defining the boundaries of HIAs. That is why HIA must be concerned broadly with individual and public health and all its social, cultural, political, economic, and environmental determinants.

Such a broad definition of health has clear implications for which decisions may be subject to HIA, the scope of issues and measures used to characterise health in HIA, and how health effects are weighed in relation to competing outcomes. In general, the public-health practice has traditionally defined health more narrowly and focused on disease, morbidity, and longevity. Thus, many decisions that affect health determinants have been considered outside the scope and mandate of public-health institutions. The failure to attend to the broader health determinants—for example, economic conditions—have contributed to avoidable disease and health disparities. However, broadening the definition of health has implications for the work of other sectors and their relationships with each other and with public health. This implies that all policies addressed or implemented should be assessed on both positive and negative impact to the social and ecological determinants of health for population. However, expecting institutions outside the health-care and public-health sectors to advance public-health interests will be challenging. Since, broad actions responsible by various societal sectors needed to protect and promote health are often in conflict with the interests and objectives of other sectors.

Thus, any future policies, standards, or regulations for HIA should include explicit criteria for identifying and screening candidate decisions and rules for providing oversight for the HIA process; such criteria and rules would promote the utility, validity, and sustainability of HIA practice.
Prof. Kee-Seng CHIA, M.B.B.S, MSc. (OM), MD  
Dean, Saw Swee Hock School of Public Health, National University of Singapore  
Email: ephcks@nus.edu.sg

Dr Chia is the Dean and Professor in the Saw Swee Hock School of Public Health, National University of Singapore. He received his medical degree in 1981, Masters of Science in Occupational Medicine in 1985 and Doctor of Medicine in 1995.

His current research focuses on the study of how genetic and lifestyle factors interact to cause chronic diseases (cancer, cardiovascular diseases, and diabetes mellitus) and the translation of these findings to preventive measures at the population level.

He also serves as a Council Member of the Workplace Safety and Health Council and Board Member of the Health Promotion Board.

CURRICULUM VITAE

1. DEGREES/DIPLOMAS/PROFESSIONAL QUALIFICATIONS

1. Bachelor of Medicine & Bachelor of Surgery (M.B.B.S) from the National University of Singapore, 1981.
2. MSc. in Occupational Medicine (O.M.) from the National University of Singapore, 1985.
3. Doctor of Medicine (MD) from the National University of Singapore, 1995.

2. PRESENT APPOINTMENT

1. Dean, Saw Swee Hock School of Public Health, National University of Singapore  
   (October 01, 2011 – December 31, 2017)
2. Professor, Department of Epidemiology and Public Health, National University of Singapore.  
3. Adjunct Group Leader, Genome Institute of Singapore (GIS) (10 May 2004 – 9 May 2017)
4. Adjunct Senior Principal Clinician Scientist, Singapore Eye Research Institute (SERI), Singapore  

Dr. Sylvia Sax
International Public Health Consultant, Researcher and Lecturer, Institute of Public Health, University of Heidelberg, Germany  
Email: sylvia.sax@urz.uni-heidelberg.de

Dr. Sylvia Sax has degrees in Nursing (Canada and USA) and Public Health (New Zealand and Germany). She has worked in clinical, management and advisory positions and has experience in both developed and developing health systems. She has a special interest in Health Care Accreditation and the link between quality and financing in Universal Health Coverage. Currently Dr. Sylvia works as a lecturer, Public Health Scientist and International Health Consultant specializing in training and health system strengthening with a focus on evaluation and management of quality. She teaches at the University of Heidelberg and Humboldt University, Berlin and works with governments and development partners in strengthening health systems throughout the world such as in Kenya, Tanzania, Cambodia, Kazakhstan, Pakistan, Yemen and India.
Dr. Robert D. Newman, MD, MPH
Cambodia Country Director
U.S. Centers for Disease Control and Prevention (CDC)

Dr. Newman is currently the Country Director for CDC in Cambodia, overseeing activities related to HIV/AIDS, tuberculosis, malaria, health security, outbreak response, health systems strengthening, and capacity building. He began his service at CDC as an Epidemic Intelligence Service Officer in 2000 in the Malaria Branch, where he spent 9 years, including serving as the CDC team lead for the US President’s Malaria Initiative from 2006 to 2009. From 2009-2014, Dr. Newman was Director of the Global Malaria Program at the World Health Organization (WHO) in Geneva. Most recently, Dr. Newman served as Managing Director for Policy and Performance at Gavi, the Vaccine Alliance, in Geneva, Switzerland. In that role, he oversaw organizational strategy setting, performance metrics, market shaping, policy development, business planning, monitoring and evaluation, and risk management. Dr. Newman received his BA in English Literature from Williams College, his MD from Johns Hopkins University, and his MPH from the University of Washington. He completed his residency in Pediatrics at the University of Washington–Seattle Children’s Hospital in 1996, and stayed on to complete a National Research Service Award fellowship in General Pediatrics in 1998. He has published more than 65 peer-reviewed articles on malaria and other infectious diseases.

Rethy Kieth Chhem, MD, PhD (edu), PhD (His)
Executive Director, CDRI Cambodia

Medical Doctor, biomedical scientist, science diplomat, historian of medicine, and comparative educationist, with experience in internationalization of Higher Education, ASEAN Higher Education and Global Health.

Prof. Chhem Rethy has published more than 100 peer-reviewed articles on medical radiology, radiation medicine, nuclear disaster and health, ultrasound and imaging technology, high education and medical history and health care system in South East Asia. Also he has been authored and co-authored more than 10 medical books, radiology education, about 20 book chapters relevant to his in his specialties.

EDUCATION
2009 PhD in History: University of Montreal, Canada
1997 PhD in Education: University of Montreal, Canada
1981 MD: University of Paris, France

REPRESENTING THE IAEA (2008-2014)
- Davos World Economic Forum
- UNSCEAR (UN Scientific Committee on the Effects of Atomic Radiation)
- WHO/World Health Assembly
- Co-Chair Working Group: IAEA Report on Fukushima Nuclear Accident

PROFESSIONAL EXPERIENCE
2014 Executive Director, Cambodia Development Resources Institute
2008 – 2014 Director, Division of Human Health, Department of Nuclear Sciences and Applications, International Atomic Energy Agency (IAEA)
2003 – 2008 Chair, Department of Medical Imaging, University Hospital, Western University, London, Canada
1988 – 2008 Professor of Radiology, Sherbrooke, McGill, Western University and National University of Singapore

CURRENT ACADEMIC APPOINTMENTS: Visiting Professor
- Atomic Bomb Disease Institute, Nagasaki University, Japan
- Hiroshima University, Japan
- Fukushima Medical University, Japan
- Tembusu College, National University of Singapore
ACHIEVEMENTS IN HIGHER EDUCATION over 25 years

- Education initiatives at UN organizations (IAEA, UNESCO, WHO):
  - Launched MSc Medical Physics program at the International Center for Theoretical Physics (UNESCO, IAEA, Gov of Italy)
  - Initiated a successful global program on Mobile-Learning
  - Designed curriculum for Global Cancer control and care in collaboration with WHO
  - Initiated a Global Science Technology Studies (STS) curriculum as a response to the Fukushima nuclear disaster

- Advised University Presidents (ASEAN, Asia, Europe, and Africa) on strategies to internationalize their university’s mission.
- Instrumental to the medical education reform (Introduction of PBL) at the National University of Singapore
- Founding Director of the Medical Education Unit
- Represented the National University of Singapore at the International Virtual Medical School.
- Chairman of the Pro-Tem Committee of a graduate medical school (Now Duke Graduate Medical School, NUS)
- Founding President of the Asia Pacific Association of PBL in Health Sciences
- Published a trilogy on Radiology Education, 3 Volumes, Springer
- Edited the Cambodia Education 2015, CDRI

Assist. Prof. Ir Por, MD., MPH., PhD
Chief, Technical Bureau, NIPH

Dr. Por Ir is an assistant professor, chief of Technical Bureau, at the National Institute of Public Health in Cambodia. He is a medical doctor holding a master degree in public health from the Institute of Tropical Medicine in Antwerp, and a PhD from the Free University of Brussels, Belgium. He has worked for more than 20 years in various MOH and donor-supported disease control and health system strengthening projects. Throughout his career, he has also participated in many academic and research activities, nationally and internationally and has published several articles, book chapters and working papers on health systems and health financing, in particular results-based financing, access to health care for the poor and vulnerable, and reproductive, maternal, neonatal and child health. He has been an active member of several national technical working groups for strategy and policy development and program evaluations.
Oral Presentations
Parallel Session: Oral Presentation 1

05 November, 2016, 11:00-12:30

Burden of Diseases, Communicable Diseases 1

Chair: Assoc. Prof. Wongsa Laohasiriwong
Khon Kaen University, Thailand
Co-Chair Prof. Cai Le
Kunming Medical University, China

Public Health Intervention 1

Chair: Prof. Nay Soe Muang
University of Public Health, Myanmar
Co-Chair Dr. Wilawun Chada
Mahasarakham University, Thailand

Universal Health Coverage 1

Chair: Prof. Wittaya Yoosook
Mahasarakham University, Thailand
Co-Chair Dr. Khim Keovathanak
Public Health Department University of Health Sciences, Cambodia

Health Promotion 1

Chair: Prof. Chaiyuth Chavalmitthikul
Thammasat University, Thailand
Co-Chair Assist. Prof. Chan Sodara
Technical Officer US CDC Office, Cambodia

Track: Burden of Diseases, Communicable Diseases 1

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>OP83</td>
<td>Analysis On Seasonal Distribution Of Japanese Encephalitis In Yunnan, 1952-2015</td>
<td>Ms. Qiu Yan Zhu</td>
</tr>
<tr>
<td>11:15</td>
<td>OP123</td>
<td>Analysis Of Characteristics And Influencing Factors Of Patients With Multidrug-Resistant Tuberculosis In Yunnan Province</td>
<td>Ms. Qunbo Zhou</td>
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<tr>
<td>11:30</td>
<td>OP134</td>
<td>Knowledge, Attitude And Practice On Japanese Encephalitis Among Community In Affected Villages, Sittwe Township, Rakhine State</td>
<td>Dr. Soe Win Paing</td>
</tr>
<tr>
<td>11:45</td>
<td>OP149</td>
<td>Neurodevelopment Of HIV-Exposed-Uninfected Children Under 3 Years Old In High HIV Prevalence Areas In Yunnan China</td>
<td>Mrs. Wu Jie</td>
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<tr>
<td>12:00</td>
<td>OP191</td>
<td>Predictors Of Sexual Risk Behavior Among People Who Use Drug In Communities In Cambodia</td>
<td>Mr. Chamnab Ngor</td>
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Analysis On Seasonal Distribution Of Japanese Encephalitis In Yunnan 1952-2015

Qiu Yan Zhu
School of Public Health of Kunming Medical University,

Objective: To study the characteristic of seasonal distribution under different immunization strategies in Yunnan, and provide theoretical basis for control and prevention of Japanese encephalitis (JE).

Methods: The morbidity data of JE from 2005 to 2015 in Yunnan province were analyzed by Muster method and Circular Distribution method.

Result: Totally 47885 people in Yunnan province suffered from JE from 1952 to 2015, and 6569 died. The average annual morbidity was 1.79/100000, and the fatality rate was 18.2%. The M value of concentration ratio of seasonal distribution of JE was 0.706, and the M value of concentration ratio of three different stages were 0.657, 0.594 and 0.864. The average angle of JE incidence of three different stages were 284.05°, 243.27°, and 209.42°, respectively. The average peak day of the disease were on September 9th, September 4th, and July 7th, and the duration of peak were 7th July - 14th November, 18th July-20th October, 3th July - 1th September. There were significant differences among the peak day at different patches (P<0.001).

Conclusion: The immunization measures of Yunan province have obtained remarkable results, which control the morbidity of JE effectively and enhance the seasonal characteristic. The peak day of JE was brought forward to 30th July, and the duration of peak was 3th July - 1th September, when the department concerned should imply the targeted prevent and control measures.

Analysis Of Characteristics And Influencing Factors Of Patients With Multidrug-Resistant Tuberculosis In Yunnan Province

Qunbo Zhou, Lin Lu

1Kunming Medical University, 2Yunnan Center for Disease Control and Prevention,

Abstract

Background: The study aims to analyze the characteristics of patients with multidrug-resistant tuberculosis in Yunnan province and explore its influencing factors, thus providing decision-making basis for effective control and scientific management of multidrug-resistant tuberculosis.

Measures: A retrospective study was conducted among 5271 multidrug-resistant tuberculosis (MDR-TB) suspects who were diagnosed and registered at tuberculosis management information system from January 2013 to December 2015 in Yunnan province. Using unconditioned logistic regression analysis to explore risk factors influencing multidrug-resistant tuberculosis patients. P<0.05 was set as statistically significant level.

Results: Total 5271 MDR-TB suspects accepted screening, among which 280 cases were diagnosed as MDR-TB patients (5.31%). 2.90% new smear positive patients were MDR-TB patients. Suspects who were registered as other patients (such as smear negative culture positive) MDR-TB detection rate was 12.96%. Among all high risk suspects 20.20% were MDR-TB patients, of which retreatment failure patients MDR-TB detection rate was highest of 88.20%, initial treatment failure, relapse, return after missing, smear positive at the end of the 3rd month of treatment patients MDR-TB detection rate was 16.80%, 20.60%, 11.10% and 6.20% respectively. Multivariate analysis showed that the high risk groups had more risk than new smear positive patients, in those the retreatment failure patients at highest risk of MDR-TB (ORadjusted = 39.84), patients with smear positive at the end of the 3rd month of treatment in general hospital were 2.01 times to who treat in the centers for disease control.

Conclusion: Considering the characteristics of MDR-TB patients and the risk factors of MDR-TB, Yunan province should formulate the corresponding strategy, and implement the MDR-TB early discovery, early diagnosis and early treatment.

Keywords: Multidrug-resistant tuberculosis; Characteristics; Risk factors
Background: Japanese Encephalitis is a major public health problem due to high case fatality rate, high rate of severe long lasting neurological symptoms and majority of deaths in children. Rakhine State had frequent occurrence of sporadic outbreaks of JE since 2007. We need to know existing knowledge, attitude and practice of high risk communities to participate in implementing activities of prevention and control programs.

Objective: To study Knowledge, Attitude, Practice on Japanese Encephalitis among community in affected villages of Sittwe Township, Rakhine State.

Method: A cross-sectional descriptive study was done using semi-structured questionnaire among 216 respondents (over 18 to 65 years of both sex except who were not willing to answered) who were selected from five JE IgM(+) villages among ten acute encephalitis syndrome affected villages by systematic sampling methods.

Results: Most of them were female (81%), married (83.8%), dependence (49.1%), middle age (30.6%), with low level of education and low per capita income. Although 71% of the respondents had heard about JE, only 10.2% had high knowledge level, 29.2% had negative attitude and only 38.0% had good practice to prevent JE. Although 74% of the respondents answered JE could be prevented, only 50.9% answered by immunization. About 23% of the respondents had not immunized their children with JE vaccine.

Conclusions: This study highlighted that the study population was who had already got health education program and vaccination program from township health staff; the community had wrong knowledge in transmission and prevention of disease. It was showed that there were some gaps in dissemination of JE information to community by health care providers. More efforts by health care providers on social mobilization, advocacy meeting and risk communication is recommended to increase awareness of JE at community level.

Keywords: Japanese Encephalitis, Knowledge, Attitudes, Practice
Predictors Of Sexual Risk Behaviour Among People Who Use Drug In Communities In Cambodia

Chamnab Ngor1, Heng Sopheab1, Chhea Chhorvann1, Mam Sovatha2
1School of Public Health, National Institute of Public Health, Phnom Penh, Cambodia, 2National Center for HIV/AIDS, Dermatology and STD, Phnom Penh, Cambodia,

Background: In Cambodia, HIV epidemic remains high among people who use drugs (PWUD) 4%, and among people injecting drugs (PWID) 24.5%. Complex and overlapping risk behaviors have found to be linked to sexual risk behaviors. This study aims to assess the potential predictors of sexual risk behaviors among this group.

Methods: IBBS data were collected from 9 provinces in 2012 among 1626 PWUDs. The Respondent Driven Samplings (RDS) was used to recruit participants. Univariate and multivariate logistic regression analyses using STATA were performed to determine the independent factors associated with sexual risk behaviors among men and women PWUD.

Results: Nearly 60% of men and 90% of women reported paid sex, but the inconsistent condom use with such partners was high for men (46%). About 20% of women having casual partners reported using inconsistent condoms. For men, following factors were independently associated with sexual risk behaviors: high mental disorders scores with the odds ratio (OR) ranged from 1.9 to 3.2, high-risk geographical regions, non-married. However, heroin use (OR = 0.5, 95% CI: 0.2- 0.8) and HIV testing (OR = 0.6, 95% CI: 0.4- 0.8) found to reduce sexual risk behaviors. For women, factors independently associated with sexual risk behaviors: age ≤20 (OR = 5.4, CI: 1.0 – 29.3), living with friends/others (OR= 6.4, 95 % CI:1.8 - 22.3) and heroin use (OR= 4.8, 95% CI:1.1 - 21.9).

Conclusions: Our study indicates higher risk sexual behaviors among both men and women PWUD. Strong predictors of sexual risk behaviors for men were related to severe mental health disorder scores and regional provinces specific, report of HIV testing and non-married. While heroin users reduced the risk of paid-sex partners among men, it may increase the risk of inconsistent condom use among women. HIV interventions should be more targeted at mental health and provinces specific interventions as well as women living independently.

Keywords: Predictors, factors, sexual risk behavior, inconsistent condom use, paid sex partners, casual partners, people who use drug, Cambodia.
Introduction: Conducting longitudinal studies among female entertainment and sex workers (FESWs) is challenging due to loss to follow-up (LTFU), which potentially affects the validity of the studies. The study to identify the predictors has never been done in Cambodia. We aimed to examine LTFU among FESWs in a longitudinal study in Cambodia.

Method: The Cambodia Integrated HIV and Drug Prevention Implementation (CIPI) is an implementation study, aimed to reduce drug use and HIV risk among FESWs. CIPI has been conducting in 10 provinces in Cambodia. In each province, CIPI set up a research team at drop-in-centers of local NGOs which has been working on HIV prevention among FESWs. For the analysis in this study, data was taken from the first four provinces. Our primary outcome was the LTFU during 12-month follow up, which was estimated by Cox proportional hazards regression.

Results: Of the 255 participants enrolled at baseline, 187 (or 73%, 95% CI: 67-78%) remained six months later for the first follow up assessment and 160 (or 62%, 95%CI: 57-68%) remained at the last follow-up visit 6 months later. The final model revealed that two variables independently associated with LTFU. FESWs who reported having registered in SMARTgirl for more than 6 months were less likely to be LTFU (aHR 0.5, 95% CI 0.3 -0.8) compared to FESWs who had registered within the past 6 months, or not at all. FESWs who had experienced food insecurity were more likely to be LTFU (aHR 1.6, 95% CI:1.1- 2.5). However, being young and having contacts information of the outreach workers did not associate with LTFU.

Conclusion: The estimates LTFU rate at 12 months was 42 per 100 person-years and the LTFU was significantly lower in FESWs who have been registered in SMARTgirl program for more than six months and those who reported having food security. Age, ATS use, exposure to and CCT+AC were not found associated with LTFU. To better understand the factors of LTFU, additional study should be conducted among those who are not member of HIV prevention program.

Background: Sexual transmission is the main way of HIV spread among the three routes of HIV transmission. The HIV-infected or AIDS patients are likely to spread HIV to their negative spouses which causing sexually transmitted within the family. Since 1997, the first HIV infected was found in Yuan Yang of Yunnan Province, China. The number of HIV/AIDS cases had been increasing yearly, and this area became one of the regions that bore heavy HIV/AIDS burdens.

Aims: (i) To analysis of HIV-infected spouse accepting HIV testing situation, (ii) to search the influence factors associated with HIV positive detection.

Methods: Collect the information of people undergoing HIV voluntary counseling and testing (VCT) in Yuan Yang from 2014 to 2015, screen out the spouse’s information for their partner was HIV positive patients. Data sorting by using Microsoft Excel 2007 and statistical analysis by SPSS17.0 .Multivariate logistic regression analysis was used for influence factors analysis.

Results: A total of 263 people enrolled in the study. There were 80 people were diagnosed with HIV infection and the HIV positive detection rate up to 30.4%. Only 131(49.8%) people had received HIV antibody detection in the past among 263 interviewees, and the HIV positive detection rate was 19.1% is lower than those who hadn’t (41.7%), Statistically significant difference (chi-square = 15.84, P < 0.05). Multivariate Logistic regression showed that the first diagnosed HIV infected for men (OR=1.87,95% CI,1.05-3.34) and not receiving HIV testing in the past(OR=2.81,95% CI,1.59-4.99) at high risk to get HIV infection. While and less than 50 ages especially 20 to 49 ages(OR=0.4,95% CI,0.19-0.82) were less likely to get HIV infection.

Conclusion: HIV positive detection rate is high among those people whose partner was HIV infection or AIDS patients in Yuan Yang county of Yunnan province, China. For the further prevention and control, it is necessary for us to strengthen the follow-up management of negative spouse in the positive partner family in order to reduce HIV second generation spread.

Keywords: HIV, spouse positive, receive testing, detection rate, influence factors
Benefits Of Regular Physical Activity On Cardio-Metabolic Risks Among Overweight And Obese Individuals

San San Htay, Htin Soe, Khay Mya

University of Public Health

Globally, overweight and obesity, and related cardio-metabolic risks are major public health problems. Prevention and control of them is one of challenging in public health. This study was conducted to study the benefits of regular physical activity on cardio-metabolic risks among the overweight and obesity. The quasi-experimental study design was used and effect of intervention was analyzed by paired t test. Total number of 32 overweight and obese persons with cardio-metabolic risks, voluntarily participated in the intervention which was regular taking of moderate intensive physical activity or exercise for at least 30 minutes per day for three months complemented with health education about healthy diets. It was not recommended to restrict meal and to do heavy exercise.

After 3 months intervention, BMI (p =0.02), body weight (p <0.001) and waist circumference (p =0.034) were significantly reduced. And both systolic (p =0.04), diastolic blood pressure (p <0.001) and fasting blood glucose level (p <0.001) also were reduced significantly. Regarding lipid profiles, total cholesterol level (p <0.01) and triglycerides (p =0.07) were decreased. But at the point of 6 months follow up, CM risks were somewhat increased again, as they could not take physical activity or exercise regularly in that period.

Regarding health related quality of life, total quality of life score (combination of both physical and mental functioning scale) which was measured by 36 SF form, was significantly increased after 3 months intervention (p <0.001).

It can be concluded that regular taking of moderate intensive physical activity or exercise complemented with healthy diets may reduce the CM risks, and improve the health related quality of life among overweight and obese persons. Therefore, it may be one of the empirical evidences to support for the benefits of regular physical activity or exercise on some degree reduction of CM risks in Myanmar people lifestyle. It should be encouraged to take moderate intensive physical activity or exercise regularly for long term, especially for overweight and obese individuals to promote health related quality of life.

Key words: Overweight and obesity, Cardio-metabolic risks, Moderate intensive physical activity, Health related quality of life

Utilization Of Services Provided By Ethnic Minority Midwives In Mountainous Villages Of Vietnam

Doan Duong, Thi Thu Ha Bui, Tolib Mirzoev

Hanoi School of Public Health,
University of Leeds,

Background: Since 2011, the Vietnam’s Ministry of Health implemented the ethnic minority midwives (EMMs) scheme in order to increase utilisation of maternal health services by women from ethnic minorities and those living in hard-to-reach mountainous areas. This paper analyses the utilization of antenatal, delivery, and postpartum care provided by EMMs and reports the key determinants of utilisation of EMMs’ services as perceived by service users.

Methods: A structured questionnaire was administered in 2015 to all mothers (n=320) who gave birth to a live-born during a 1-year period in 31 villages which had EMM in two provinces, Dien Bien and Kon Tum. A multi-variate logistic regression model was used to examine the association between all potential factors and the use of services provided by EMMs.

Results: We found that EMMs provided more Antenatal Care (ANC) and Post-natal care (PNC) as compared with Delivery services, which corresponded to their job descriptions. The results also showed that utilization of ANC provided by EMMs was lower than PNC. The proportion of those who never heard about EMM was high, at 24%. Amongst the mothers who knew about EMMs’ services, 33.4% had antenatal check-ups, 20.1% were attended during home deliveries, and 57.3% had postnatal visits by an EMM. Key factors which determined the use of EMM’s services included knowledge of the location of EMM’s house, being aware about EMMs by health workers, trust in services provided by EMMs and perception that many others mothers in a village also knew about EMM’s services.

Conclusions: EMM appear to be an important mechanism to ensure assistance during home births and postnatal care for ethnic minority groups, who are often resistant to attend health facilities. Building trust and engaging with communities are the key facilitators to increase utilization of services provided by EMMs. Communication campaigns to raise awareness about EMMs and to promote their services in the village, particularly by other health workers, represent an important strategy to further improve effectiveness of EMM scheme.
Analysis Of Liver Fibrosis And Will Of Receiving DAA Treatment In HIV/HCV

Yue-Qi Sun, Zhi Luo, Jia Yang, Hong-Yan Liu, Hao-Ming Xue, Hong Li, Lin Duo

1YDHR-YN, Kunming Medical University.
2YNCDC
3The second people’s Hospital of Yunnan Province

Objective: Investigating liver fibrosis and their will of receiving DAA treatment in HIV/HCV co-infected, providing the basis for hepatitis c patients getting accessibility DAA treatment.

Methods: In March 2016, all HIV/HCV co-infected in some AIDS antiviral treatment clinics in Kunming, Yunnan province. Investigating demographic information, FIB-4 non-invasive index assessment of liver fibrosis and DAA treatment requirements through an cross-sectional study. Establishing a database by using EpiData3.1, doing descriptive statistical analysis by SPSS17.0.

Results: 303 patients with HIV/HCV were recruited in total. Average age of 43.4±5.7, Male 204 cases(68.5%), Family per capita monthly income less than 2000(77.9%), there are 64.5% patients that the degree of liver fibrosis is in F2 level and above. Willing to accept new drugs to treat and willing to hepatitis c liver function were detected, respectively, account for 82.5%, 96.3%, 62.7% of them want to get DAA treatment for free.

Conclusion: The degree of liver fibrosis is more serious during HIV/HCV co-infected, they would like to accept DAA to treat hepatitis c and hope the government can provide free treatment.

Keywords: HIV/HCV co-infection; liver fibrosis; DAA drugs; will of treatment
Health Seeking Behavior Of Lisu Ethnics From Chaung-Gyi Village, Mogok Township, Mandalay Region, Myanmar

Yuzana Mon1, Moh Moh Hlaing1
1University of Public Health, Yangon, Myanmar

Background: Racial and ethnic minorities tend to have poor quality of health care than non-minorities. To reduce health inequities and to promote the health status of ethnic minorities, it is required to know the barriers and needs of the ethnic groups. According to Myanmar health vision 2030, Myanmar aspires to achieve Universal Health Coverage (UHC) and to reduce health disparities. It is estimated that one third of Myanmar population are ethnic minorities and Lisu is one of them. Understanding health seeking behavior especially from ethnic minorities is essential to improve health practices and utilization of health services.

Aim: The aim of this study was to find out the health seeking behavior of Lisu ethnics from Chaung Gyi village tract, Mogok Township, Mandalay Region.

Methods: A community-based cross-sectional descriptive study design using both quantitative and qualitative approaches was conducted during September to December, 2015. Total 170 Lisu populations were interviewed for quantitative data by using semi-structured pre-tested questionnaire. For qualitative data, individual in-depth interviews and key informant interviews were also conducted.

Results: Among the respondents, 21% treated at public health centre and 79% didn’t go to health centre and treated with other methods such as traditional methods, self treatment, treated with unqualified allopaths and treated at private clinic when they got illness. Health seeking behaviors and utilization of health services of study population from study area were associated with presence of underlying diseases, accessibility of health facilities including both health centre and health staff, travelling time to nearest health facilities, affordability to health care cost and easily availability of drugs from nearby stores. The respondents treated at public health centre only when their illness became severe and not relieved by other methods.

Conclusion: In conclusion, believes on the traditional treatment practice, growing of informal health care and availability and affordability of public health services might influence the health seeking behavior of Lisu from the studied area.

Psychometric Properties Of The Context Assessment For Community Health (Coach) Tool In Vietnam

Duc Minh Duong1, Ha Bui1
1Hanoi School of Public Health

Background: The recently developed Context Assessment for Community Health (COACH) tool aims to measure aspects of the local health care context perceived to influence knowledge translation (KT) in low- and middle-income countries (LMICs). The tool measures 8 dimensions: Resources, Community engagement, Monitoring services for action, Sources of knowledge, Commitment to work, Work culture, Leadership, and Informal payment through 49 items.

Objective: The study aimed to explore the understanding and stability of the COACH tool amongst health providers in Vietnam.

Methods: To investigate response process, think-aloud interviews were undertaken with 5 community health workers, 6 nurses and midwives, and 5 physicians. Identified problems were classified according to Conrad and Blair’s taxonomy and grouped according to an estimation of the magnitude of the problem’s effect on response data. Further, the stability of the tool was examined using a test-retest survey amongst 77 respondents. Reliability was analysed for items (intraclass correlation coefficient (ICC) and percent agreement) and dimensions (ICC and Bland-Altman plots).

Results: In general, the think-aloud interviews revealed that the COACH tool was perceived as clear, well organized, and easy to answer. Most items were understood as intended. However, 7 prominent problems in the items were identified and the content of 3 dimensions were perceived to be of a sensitive nature. In the test-retest survey, two-thirds of the items and 7 of 8 dimensions were found to have an ICC agreement ranging from moderate to substantial (0.5 to 0.7), demonstrating that the instrument has an acceptable level of stability.

Conclusions: This study provides evidence that the Vietnamese translation of the COACH tool is generally perceived to be clear and easy to understand and has acceptable stability. There is, however, a need to rephrase and add generic examples to clarify some items and to further review items with low ICC.

Keywords: Knowledge translation, context assessment, response process, think-aloud interview, test-retest, validity, reliability, implementation science.
An adequate and qualified health workforce is critical for Universal Health Coverage. In many countries, the health workforce is largely female; although leadership is primarily male. In Cambodia women constitute only 20% of the senior roles in the Ministry of Health. There is limited empirical evidence on why these disparities exist and their implications. This study explored how gender roles and relations shape their technical progression and leadership in the Cambodian health sector through time.

Qualitative life histories were conducted with 20 purposively selected women and men working in management of health sector from two operational districts in Battambang province. Selection was based on their service dates, skills, experiences and career progression. The framework developed by Syde and Ozbilgin informed the analysis of how experiences were shaped at the macro (socio-cultural factors); meso (culture of the organisation and management) and micro (human capital and personality traits) levels.

Gender roles and relations affect entry to the health sector, progression and leadership at all levels through time. At macro level some women health workers faced negative perceptions about their jobs, when staying away from home (especially at night). Women experienced challenges in juggling occupational/family responsibilities and tended to prioritize families. At the meso level national and provincial government structure have become more gender sensitive with gender focal points and gender working groups. Government policies and quotas have promoted women’s entry to leadership positions. Some superiors (mainly male) also addressed problems and managed the way for women to progress in their career. Micro level factors included capacity, determination and support to succeed, and confidence; men were more confident and often had more autonomy to push forward in their career advancement compared to women.

Achieving Universal Health Coverage requires addressing gender equity at all levels of the health sector. The findings showed there are multiple intersecting barriers and enablers to women’s career progression in Cambodia. Family and social appreciation have been very important for professional development. Further support at the meso level, including mentoring, supervision and gender policy will accelerate progress in addressing gender inequality in health workforce leadership.

Key words: Gender, Health Workforce, Career Advancements, Leadership, Cambodia

Background: Decentralization of ART services has been conducted in Vietnam since 2011 with the aims of helping the country to reach and sustain universal access to treatment. This study aims to examine treatment outcomes of the decentralization of the antiretroviral therapy (ART) services from provincial and district outpatient clinics (OPCs) to commune health centers (CHCs). The findings will provide the scientific evidence for better programming, good governance and ultimately bringing more benefits to PLHIV and key populations of HIV/AIDS in Vietnam.

Methods: Cohort study design was deployed with retrospective data collection to gather secondary data available at service facilities using designated forms in order to compare treatment outcomes of two groups of patients – patients who were received treatment at CHCs (decentralized patients) and patients who remained to receive treatment at OPCs (non-decentralized patients). Total sampling method was applied in this study. All patients who initiated ART treatment at the OPCs from 01 Jan 2013 to 30 June 2014 were included in this study. In total, there were total 855 patients were included (650 patients in Dien Bien and 205 patients in Ninh Binh).

Results: Decentralization of ART services brought better treatment outcomes for patients such as higher first line retention rate, CD4 count at 6-month and 12-month time points among decentralized patients in both provinces. However, it was unable to run statistical test to compare dead and stop rate between these two groups as the number of observation was too small. When comparing between two provinces, it was noticeable that all indicators in Dien Bien were significantly higher than in Ninh Binh at any time points. Main challenges of ART services decentralization are social stigma towards HIV/AIDS patients and lack of the technical supports from higher level OPCs to health staff at CHCs.

Conclusion: Significant treatment outcomes were shown with the decentralization of ART services in Vietnam. However, in order to sustain ART service quality at commune health centers, it is necessary to improve linkage in between CHCs and health facilities at higher levels, especially supportive supervision in ART provision.
Unit Cost Of Vaginal Delivery And Caesarean Section At South Okkalapa Women And Children Hospital

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2Assistant Lecturer, Biostatistics Department, University of Public Health, Yangon
3Professor and Head of Health Policy and Management Department, University of Public Health, Yangon

Background: Myanmar health care system is moving along with political and economic transitional period and cost information is needed and useful for health reform such as decentralization, development of new health insurance scheme and benefit package for maternal health intervention to achieve universal health coverage and for efficient utilization of limited resources. There is scarcity of unit cost data regarding the maternal health care services in Myanmar.

Objective: To estimate the unit cost of maternal health care services at South Okkalapa Women and Children Hospital (SOWCH), Yangon Region, Myanmar.

Methods: A hospital based cross-sectional descriptive study using step down cost accounting method (from provider perspective) was carried out at SOWCH (150 bed). It was done from September to December 2015. Annual data, administrative records, registers and utilization record from 1st April 2014 to 31st March 2015 (financial year 2014-2015) were taken by using proforma. Capital asset was also included in cost analysis of this study. Sensitivity analysis was done to address uncertainties by changing on discount rate.

Results: According to the study, unit cost of vaginal delivery was 94,769 kyats (73 US$); unit cost of caesarean section was 173,553 kyats (133.5 US$); unit cost per antenatal visit was 4,787 kyats (3.7 US$); unit cost per postnatal visit was 4,117 kyats (3.2 US$) in SOWCH.

In cost structure of the study hospital, human resources were major cost driver (42%) of total cost of SOWCH. Second most was drugs and medical supplies in this hospital (32%).

According to cost consuming pattern, inpatient cost consumed more than outpatient cost. Drugs and medical supplies were found to be largest component in Maternity ward and Operation Theater cost center. In Outpatient Department cost center, human resources was main cost driver.

Conclusion: On conclusion, this study provide the unit cost of maternal health care services funded by government and basic cost information at public hospital that can assist policy maker or health planner to allocate limited resources to maternal and child health services, to develop Essential Health Package to comprehensive quality health services for all.

Keywords: Unit cost, vaginal delivery, Caesarean section

Track: Health Promotion 1
Room: Kravann
Time: 11:00 – 12:30

Chair: Prof. Chaiyuth Chavalitnithikul
Thammasat University, Thailand
Co-Chair: Assist. Prof. Chan Sodara
US CDC Office, Cambodia

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 - 11:15</td>
<td>OP46</td>
<td>Mobile Phone Use And The Relationship With Sleep Disturbances, Distress And Learning Outcomes Among Students At Hue University Of Medicine And Pharmacy in 2015</td>
<td>Mr. Thanh Nhan Nguyen Phuc</td>
</tr>
<tr>
<td>11:15 - 11:30</td>
<td>OP65</td>
<td>A Meta-Analysis Of Factors Associated With Malaria Prevention Behavioral Based On The Health Belief Model Concept</td>
<td>Ms. Pornpimon Pradit</td>
</tr>
<tr>
<td>11:30 - 11:45</td>
<td>OP66</td>
<td>Meta-Analysis Of Factors Associated With Malaria Prevention Behavioral To Follow The Social Support Theory</td>
<td>Ms. Pornpimon Pradit</td>
</tr>
<tr>
<td>11:45 - 12:00</td>
<td>OP75</td>
<td>Microbiological Safety Of Ready-To-Eat Raw Vegetables From Food Stalls</td>
<td>Prof. Cho Cho Oo</td>
</tr>
<tr>
<td>12:00 - 12:30</td>
<td>OP117</td>
<td>The Research Of Chronic Disease And Epidemiology In The Va Minority Nationality And Blang Minority Nationality Living In Yunnan Province, China</td>
<td>Prof. Fang Xu</td>
</tr>
</tbody>
</table>
Mobile Phone Use And The Relationship With Sleep Disturbances, Distress And Learning Outcomes Among Students At Hue University Of Medicine And Pharmacy In 2015

Thanh Nhan Nguyen Phuc1, Nam Tran Ton Nu2, Vu Thanh Nguyen2, Minh Tam Nguyen1
Institute for Community Health Research
Hue University of Medicine and Pharmacy

Background and Objectives: Mobile phone addiction has become a common problem, especially among the youth, and heavily affected human well-being. This study is to identify the current situation of using mobile phone among students of Hue University of Medicine and Pharmacy and to examine the relationship between mobile phone use and sleep quality, distress and study results of students at Hue University of Medicine and Pharmacy.

Methods: A cross-sectional study with a randomly selected sample of 698 students of all majors (doctor and bachelor) in the 3rd year and the 4th year at Hue University of Medicine and Pharmacy. SAS-SV scale was used to evaluate phone addiction status, K10 scale was used for distress identification and PSQI scale was used for examining the sleep quality. We also collect learning outcomes of student in 2014-2015.

Results: Average daily time spend for mobile phone is 3.58 hours. 61.3% student use mobile phone for checking social network, 46.4 for gaming. The proportion of student who classified as phone addiction is 43.7%. Phone addiction rate increases gradually according to the years of using. There is an association between mobile phone addiction and sleep quality, distress and study results of students.

Conclusion: This study shows the alarming situation of mobile phone using among medical students, and helps to identify the impacts on sleep quality, distress and study results of students. The results call for solutions to reduce the rate of phone addiction and related harms.

Key words: phone addiction, sleep disorder, Pittsburgh, SAS-SV, K10, PSQI, psychological disorder.

A Meta-Analysis Of Factors Associated With Malaria Prevention Behavioral Based On The Health Belief Model Concept

Pornpimon Pradit1, Sirima Mongkolombit1, Kaysom Sumpowthong1
Thammasat University,
The objective of this study was to determine factors associated with protective behaviors to malaria infection based on theory of health belief model. The study design was systematic review and meta analysis. Electronic databases including PubMed, Malaria Journal, Malaria World Journal, ThaiLIS and Library of Disease control division Ministry of public health were used to select articles from year 1957-2013. Cochran's Q test was used analyse the meta-analysis for pooled Odds Ratio with 95% Confidence Interval of each factor.

Results: We found 105,132 articles from searching. There are 7 articles passed the inclusion-exclusion criteria and quality assessment of this study. The finding shown the people whose had perceived susceptibility of malaria disease will had protective behavior 2.04 times of who had not perceived susceptibility of malaria disease (p value < 0.001). People whose had perceived severity of malaria disease will had protective behavior 1.52 times of who had not perceived severity of malaria disease (p value = 0.003). People whose had perceived protective benefits of malaria disease will had protective behavior 3.18 times of who had not perceived protective benefits of malaria disease (p value < 0.001). And people whose had not perceived barriers of health promoting behaviors of malaria disease protection will had protective behavior 1.59 times of who had perceived barriers of health promoting behaviors of malaria disease (p value = 0.001). We could conclusion that perceived susceptibility, perceived severity, perceived protective benefits and perceived barriers of health promoting behaviors are associated with protective behavior for malaria disease. Also should be consideration these factors for health promotion program.
Meta Analysis Of Factors Associated With Malaria Prevention Behavioral To Follow The Social Support Theory

Pornpimon Pradit, Sirima Mongkolosmit, Kaysom Sumpowthong
Thammasat University.

The objective of this study was to determine factors associated with malaria preventive behavior based on social support theory. The study design was systematic review. The studies reviewed were located by searching the electronic databases PubMed, Malaria Journal, Malaria World Journal and ThaiLIS. Meta-analysis was used for statistical analysis. The results showed that there were 128,000 articles from searching, but there were only 22 articles meeting inclusion-exclusion criteria and quality assessment. The factors associated with malaria preventive behavior found that female gender had malaria preventive behavior 1.19 times of male gender (p value < 0.001), the educated person had preventive behavior 1.16 times of who did not have education (p value < 0.001), the person never suffered malaria had preventive behavior 1.36 times of the suffered malaria person (p value = 0.015), the person have knowledge of malaria disease had preventive behavior 1.22 times of person without knowledge (p value < 0.001), and the person received information support of malaria disease had preventive behavior 1.15 times of who not received information support (p value = 0.043). The social support in the knowledge and information can do to help promote people with malaria prevention behavioral.

Microbiological Safety Of Ready-To-Eat Raw Vegetables From Food Stalls

Cho Cho Oo, Kyi Kyi Swe, Nilar Tun
University of Medicine, Mandalay.

Food borne diseases are concerning public health problem both in developed and developing countries. A study was conducted to evaluate the microbiological safety of ready-to-eat raw vegetables in Chan Aye Thar Zan Township, Mandalay, from January to September 2015. The main objectives were to detect the presence and proportion of bacteria and parasitic pathogens in ready-to-eat raw vegetables from food stalls. Randomly purchased 60 samples of ready-to-eat raw vegetables (30 samples of ready-to-eat raw fruit vegetables: ten each of cucumbers, carrots and lady's fingers and 30 samples of ready-to-eat raw leafy vegetables: ten each of cabbages, lettuces and corianders) were collected from randomly chosen 30 food stalls. Microbiological safety of ready-to-eat raw vegetables was studied by performing the procedure according to “Manual of Food Quality Control.4. Rev.1. Microbiological Analysis Methods based on FAO”. Surface viable count of bacteria was determined by Miles and Misra method. Protozoal cysts and helminthic eggs were detected by direct microscopic examination. The results showed 10 out of 30 samples (33.33%) of ready-to-eat raw fruit vegetable as well as 20 out of 30 samples (66.67%) of ready-to-eat raw leafy vegetable were microbiologically unsafe. The most contaminated ready-to-eat raw vegetables were found to be cabbage and lettuce (70% each). The results pointed out that 38.33% (23/60) of samples were contaminated with Staphylococcus aureus, 33.33% (20/60) of samples were contaminated with Escherichia coli, 25% (15/60) of samples were contaminated with Salmonella species and 1.66% (1/60) of samples were contaminated with Vibrio cholerae. Among 60 samples of ready-to-eat raw fruit vegetables and leafy vegetables, total 5 eggs of helminthes (Ascaris lumbricoides, Hymenolepis nana, Trichuris trichiura and Enterobius vermicularis and Taenia species) were detected.

Therefore, in this study, a third of the samples of ready-to-eat raw fruit vegetables and two-third of the samples of ready-to-eat raw leafy vegetables were found to be microbiologically unsafe. This indicated that there was a potentiality to cause food borne diseases in consumers and also highlighted the needs for public health interventions for the prevention of food born diseases.
Background: This research is supported by National Natural Science Foundation of China (81360427). Provide basic data to further study on the influence of nutritional and non-nutritional factors upon chronic diseases in the 2 unique minorities of Yunnan province, it could provide a scientific basis for the development of Chronic Non-infectious Disease (NCD) prevention and control.

Methods: 945 residents were recruited over the age of 18 in Va and Blang minorities, who live in Shuangjiang, Lincang City of Yunnan province. The medical examination, laboratory tests and dietary surveys are applied to the members who are over 18 years old. Then main statistical methods include Chi2 test, variance analysis.

Result: There were 129 hypertensive patients [26.5%(95%CI:22.6%-30.4%)] in Va minority and there were 96 hypertensive patients [21.0%(95%CI:17.3%-24.7%)] in Blang minority. For the hypertension rates Va minority is higher than Blang minority (p<0.05). For the hypertension rates Va minority is higher than Blang minority (p<0.05). For Va minority, the amount of patients with diabetes mellitus (DM) or impaired fasting glucose (IFG) are as follows: 39 patients with DM [8.0%(95%CI:5.6%-10.4%)] and 40 patients with IFG (8.2%). And Blang minority, the amount of patients with DM or IFG were as follows: 26 patients with DM [5.7%(95%CI:3.6%-7.8%)] and 30 patients with IFG (6.6%) and the result indicates that the prevalence of DM rises with the increase of age (p<0.05).99 people were overweight [20.3%(95%CI:16.7%-23.9%)] and 35 were obesity [7.2%(95%CI:4.9%-9.5%)] of Va minority. For the central obesity the female was higher than the male (p<0.005). For the people of Blang minority, 104 were overweight [22.7%(95%CI:18.9%-26.5%)] and 27 were obesity[5.9%(95%CI:3.7%-8.1%)].

Conclusion: The rate of NDC in Va and Blang minority is not optimistic. It’s necessary to increase preventive knowledges and carry out health educations for the minority population, guide people to do physical exercise in order to change the bad life style and habits to prevent and control the occurrence and development of chronic disease.

Keywords: Va nationality, Blang nationality, Chronic Non-infectious Disease(NCD), Epidemiology Investigation
**Track:** Communicable Diseases 2  
**Room:** Ball room  
**Time:** 16:00 – 17:30

**Chair:** Prof. Wattasit Siriwong  
Chulalongkorn University, Thailand

**Co-Chair**  
Assoc. Prof. Lek Dy Soley  
National Center for Malaria and School of Public Health, Cambodia

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00 - 16:15</td>
<td>OP202</td>
<td>Expiry Date Food Situation In Convenient Store And Buddhist Temples</td>
<td>Mrs. Natchareeya Kumyoung</td>
</tr>
<tr>
<td>16:15 - 16:30</td>
<td>OP249</td>
<td>Predictors For Mortality Among HIV Infected Children On Antiretroviral Therapy In Myanmar: A Retrospective Cohort</td>
<td>Dr. Mon Lay Khaing</td>
</tr>
<tr>
<td>16:30 - 16:45</td>
<td>OP262</td>
<td>Analysis Of The Incidence Trends Of Different Age Groups Of Patients With Pulmonary Tuberculosis In Yunnan Province From 2005 To 2015</td>
<td>Ms. Qianru Yang</td>
</tr>
<tr>
<td>16:45 - 17:00</td>
<td>OP273</td>
<td>The effect Of Dental Health Educational Program To Dental Caries Prevention Among Preschool Children In The Naphosub-District Kudrang district, Mahasarakham Province</td>
<td>Mrs. Napalai Poonsiri</td>
</tr>
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</table>

**Expiry Date Food Situation In Convenient Store And Buddhist Temples**

Natchareeya - Kumyoung, Koosarb Rudtanasudjatana, Ananai Therkathuak, Sunisa Sangjun  
*Faculty of Public Health, Burapha University*

**Background:** Philanthropic food offerings is Buddhist Thailand lifestyle. Instant food’s expiry date is usually notified on its label. If the expiry date is inspected and the expired food be correctly handled, it will assist the food safety in the philanthropic food that provided to monks as well. This survey research aims to analyze the expired food situation in convenient stores and Buddhist temples to set further the suitable operation.

**Method:** Study population consisted of convenient stores, Buddhist temples, the expiry date food in convenient stores within 500 meters from the temples and the expiry date food that has been offered to monks on both Buddhist holidays and regular days. The number of study places were 45 convenience stores and 33 temples. Check list forms were used in data collection. Data analysis included frequency, percentage, standard deviation and Pearson’s correlation coefficient analysis.

**Results:** The results showed that there were 27 convenient stores with at least one type of food expired (60%). Closed-container beverages were found expired in the longest length of time, that was, 1,973 days. When compared the amount of expired food to the amount of all the food according to their types in the convenient stores, dried food was found to be the most proportional expired by 5.66%. The survey at the temples showed that expired seasonings were found both on Buddhist holy days and regular days, that were, 187 and 2,155 days of expiration respectively. There were a correlation between expiry date food in convenient stores and expiry date food offered to the monks on Buddhist holy days and regular days. Positive correlation was found on regular days in products made from wheat flour, milk and seasonings ($r = 0.897, 0.586$ and $0.933$ respectively) while negative correlation was found on Buddhist holy days, which meant that most of the expired food offered to the monks on Buddhist holy days were not from convenient stores near.

**Conclusion:** The large number of expired closed-container beverages and seasonings were found both in temples and convenient stores. There were a correlation between expiry date food in convenient stores and expiry date food offered to the monks on regular days. Therefore, it is necessary to find the operational model which is suitable to the further implementation.
Predictors For Mortality Among HIV Infected Children On Antiretroviral Therapy In Myanmar: A Retrospective Cohort

Mon Khaing-Lay1, Maung Nay-Soe1, Zaw Ko-Ko1
1University of Public Health, Yangon, Myanmar
2Department of Medical Research, Yangon, Myanmar

Background: The aim of this study was to assess the Predictors for mortality among HIV infected children on Antiretroviral Therapy (ART) at specialist hospital, Mingalardon and 300 bedded children hospital, Mandalay.

Method: Retrospective cohort study was carried out among HIV positive children (under 15 years aged) on ART from 1st January 2005 to 31st August 2012. Information on relevant variables was collected from patients’ ART cards and registries. Life table was used to estimate the cumulative survival of children. Kaplan-Meier survival curves were constructed and assessed the difference between the curves using the log ranks test.

Results: A total of 881 records were included in the data analysis. The mean (SD) age at time of diagnosis was 64.14 (38.15) months and the mean (SD) age at initiation of ART was 74.9(38.04) months. The median follow up period was 26 months (IQR= 14 to 41 months). At the end of follow up, 87(9.9%) were dead, 28(3.2%) were loss to follow up and 15(1.7%) were transferred out to other health facility. Mortality was 4.16 deaths per 100-child-years of follow up period. The cumulative probabilities of survival at 3, 6, 12, 24, and 60 months of ART were 0.94, 0.93, 0.92, 0.91 and 0.89 respectively. Majority (86.2%) of the deaths occurred within the first year of treatment. Presence of previous history of ART treatment (adjusted hazard ratio [AHR]=8.37, 95%CI:2.67,26.21), presence of tuberculosis treatment during course of illness (AHR=3.55, 95%CI:1.46,8.64), WHO clinical staging IV (AHR=2.84, 95% CI: 1.47,5.49), weight for age Z score <–3SD (AHR=6.60, 95%CI:2.99,14.57), haemoglobin level <9mg (AHR=4.44, 95%CI:2.16,9.11), and hospitalization during first 6 months of treatment (AHR=9.88, 95%CI:4.70,20.75) were predictors of mortality.

Conclusions: There was a high rate of mortality within one year after initiation of ART. Hence, priority should be given to the children during the first year after initiation of ART. Children with low haemoglobin level and low weight for age should get proper diagnosis and care such as nutrition interventions to reduce the risk of death.

Key words: HIV/AIDS, paediatrics, mortality, anti-retroviral therapy

Analysis Of The Incidence Trends Of Different Age Groups Of Patients With Pulmonary Tuberculosis In Yunnan Province From 2005 To 2015

Qianru Yang, Xu Lin
1School of Public Health, Kunming Medical University
2Yunnan Center for Disease Prevention and Control

Background: Pulmonary tuberculosis is a chronic infectious disease for the respiratory tract. Yunnan province is one of TB high-burden provinces in China. This study is that through the analysis for TB incidence of different age groups, some scientific basis will be provided for TB control work in Yunnan province.

Methods: The information of tuberculosis patients with all ages from 2005 to 2015 in Yunnan province was gained from China Information System for Disease Control and Prevention and was calculated the report incidence rate of different age groups. Meanwhile, Pearson linear correlation and trend analysis were calculated above.

Results: The notification rate of tuberculosis among different age groups in 2005-2015 is linear trend (P<0.001). The lowest onset age is in the 0~14 years, which the notification rate reduced from 21.74/100000 in 2005 to 3.95/100000 in 2015; the annual decrease rate was 13.35%. The group of 15 to 19 year-old was increasing (from 45.84/100000 in 2005 to 57.22/100000 in 2015, which annual increasing rate was 2.8% ). The group of above 60 years had the highest morbidity, which is 121.28/100000. The morbidities of male cases with different ages were higher than the ones of female case (P<0.001). But there was no obvious difference in the age group of 15 year-old, which morbidity of male vs female is 1.3:1; the morbidity differences of the different genders form 40 year-old to 64 year-old were gradually increasing, which is 2.9:1(male vs female); above 65 year-old, the gender differences were gradually narrowing, which is 1.6:1.

Conclusions: The reported incidence rate in 2005 was the highest, and the ones from 2006-2015 showed the trend of slow decline. The tuberculosis incidence of 0-14 years-old group had reduced, which illustrates that tuberculosis control work had effectiveness in our province. The reported incidence of 15-19 year-old group rose, which indicates new TB infection rate in the whole population probably pick up. For the TB characteristics of elderly group, appropriate measures to detect and control should be made. Because of high proportion of young-adult patients, they are still the pivotal group of the tuberculosis control work in our province.

Key words: tuberculosis, age, trend
The effect of dental health educational program to dental caries prevention among preschool children’s in the Napho Sub-District Kudrang District, Mahasarakham Province.

Napalai Poonsiri, Paricha Nippanon
Khon Kean University

This quasi-experimental research aimed to assess the effect of dental health educational program to dental caries prevention among preschool children’s in the Napho Sub-District Kudrang District, Mahasarakham Province. Simple random sampling were 128 parents and divided two group. The experimental group was 64 parents and comparison group was 64 parents. The experimental group received the dental health educational program by the application of health belief model and social support theory on 6 occasions over a period 10 weeks. The program consisted of a series of integrated activities involving lectures with video, dental model, group process, group discussions, demonstration and brushing, practice to check plaque index, book recordando home visited.

The comparison group received regular lessons. Data were collected by questionnaires. Descriptive statistic (percentages, means standard deviations) were used to summaries the data, and difference within and between the two groups were analyses using inference statistics. (Paired sample t-test and Independent sample t-test) Statistical significance was set the 0.05 level of, and 95% CI were computed.

The result: At the end of 10 weeks intervention program shown that the experimental group of mean score higher than before the experimental and higher than comparison group for knowledge of dental caries, perceived susceptibility of dental caries, perceived severity of dental caries, perceived benefits and barriers to dental caries prevention. These were significance (p-value < 0.001) at 95% CI and dental plaque of pre-school children in experimental group more decrease significantly than before the experiment and less than of pre-school children in the comparison group (p-value < 0.001).
Introduction:
The purpose of the study was to understand Secondhand Smoke (SHS) exposure among rural pregnant women and to analyze the influencing factors related the exposure in order to protect pregnant women from SHS and improve maternal and child health.

Methods: Data for this study was obtained from birth cohort study in 20 villages of Xuanwei County since 2014. The study focused on pregnant women’s self-report of SHS exposure by questionnaire. The subject's characteristics and the predictors of participation were analyzed by chi-square test and by multinomial logistic regression.

Results: A total of 241 patients were interviewed. The prevalence of passive smoking among the pregnant women was 24.0%. And 39.7% of subjects who were passive smoking reported for one trimester, 25.9% for two trimesters and 34.5% for three trimesters of pregnancy. Moreover, the rate of SHS exposure reported at early pregnancy, second-trimester and last trimester were 22.8%, 18.6%, and 17.2% respectively. There were significantly statistic differences between the subjects of SHS exposure and non-exposure in the awareness of SHS and smokers in family. The multinomial logistic regression identified one predictor of SHS exposure: the relative risk ratio for a one-unit increase in the awareness of SHS was 0.521 (p=0.034) for being in exposure for one trimester vs. free exposure. With increasing awareness of secondhand smoke, higher prevalence of passive smoking was achieved. But the factors such as age, nationality, educational level and social economic status there is no statistical significance (p<0.05).

Conclusion: Rural pregnant women has high rate of passive smoking. The awareness of secondhand smoke is the key factor for passive smoking intervention. Providers' capacity of Intervention related secondhand smoke would be strengthened in the maternal and child health institutions of the district, country and city. Through health education, more pregnant women will have the awareness of SHS and understanding of the risks on exposure to SHS, and finally will promote smokers in a family to change smoking habits and build home smoking ban.

Keywords: Rural pregnant women; secondhand smoke
Factors Associated With Sexual Intercourse Among Secondary Students In Suksasongkhro School

Wipansa Khamrin1, Wipansa Khamrin1, Dr. Sirima Mongkolsoomlit1
Thammasat University

The study design was an analytical cross-sectional. The objective was to examine sexual risk behaviors and factors associated with sexual intercourse among secondary students in Suksasongkhro School. Sample studies were 409 students from grade 2 to 6. Data collected provided by questionnaire. Chi-Square tests and Independent t-test were analyzed for associations between individual level and interpersonal level with sexual risk behaviors.

Results found that 7.1% of students had experience of sexual intercourse. In this group were 65.5% of male and 34.5% of female. Only 51.7% used condom during sexual intercourse, and 13.8% has sexual intercourse without consent.

Only 6.9% of female students having sexual intercourse took contraceptive pills. The characteristics factors including age, gender, level of education level and self-esteem were statistical significance associated with sexual intercourse (p=0.030, p<0.001, p=0.030 and p=0.048 respectively). The interpersonal levels factors composed of the relationship in family, faith and trust in parents, teachers were statistical significance associated with sexual intercourse (p=0.001, p=0.025, p<0.001 respectively).

In conclusion, family hygiene educating should start before high school education. And encourage parents, teachers to be a good model and suitable of sexual consulting for risk sexual behavior protection, because the student still have faith in taking a role model.

Keywords: sexual intercourse, secondary students, factor

Effect Of Health Promotion Program By Application Of Self-Efficacy And Thai Traditional Medicine Knowledge For Diabetes Prevention Among High Risk Group

Thidaporn Saisok1, Pannee Banchonhattakit1
Khon Kaen University

Background: Nowadays, the prevalence of chronic diseases dramatically increases. Diabetes Mellitus (DM) is a big problem in public health. This study aimed to test an innovative health behavior modification program by application of self-efficacy theory and knowledge about Thai traditional medicine for DM prevention among high risk group.

Methods: This Quasi-Experimental research included 80 samples; an experimental group and a comparison group (n=40). Intervention of health behavior modification program included learning experience, practicing on guidebook, recording on diary behavior, modeling, and encouraging by home visits. The duration of intervention was 10 weeks. Data were collected by questionnaires. The comparison of mean scores with in groups and between groups was analyzed by Paired samples t-test and Independent t-test at statistically significance 0.05 level.

Results: After the experiment, the knowledge about Thai traditional medicine to preventing DM of the experimental group had higher mean scores of knowledge, expectation of result, and practice in terms of eating, exercise and stress, than before the experiment and higher than the comparison group significantly (p-value < 0.05). Blood sugar rate and Body Mass Index (BMI) after the experiment, the experimental group had a lower average than before the experiment and lower than the comparison group. However, after the experiment, the expectation of self-efficacy of the experimental group had no significantly higher than the comparison group (p-value > 0.05).

Conclusions: This health promotion program is effective and should be expanded to prevent other DM high risk group.

Keywords: Diabetes Mellitus, Self-efficacy, Thai traditional medicine, Health promotion program.
Life Skills Promotion With Five Cooperate Teaching Management Process (CIPPA Model) For Promote Unwanted Pregnancy Prevention Adolescent Among A Vocational

Malai Jinakool1, Pannee Banchonhattakit1
1Khon Kaen University

Background: Situation of unwanted pregnancy in Thai adolescent was increasing and higher than the health standard criteria. This experimental research aimed to prevent unwanted pregnancy adolescence among a vocational college by life skills promotion with five cooperate teaching approach (CIPPA MODEL).

Methods: This Quasi-Experimental research included 62 samples; 31 samples in an experimental group and 31 samples in a control group. Intervention of health promotion program included role plays, brainstorming, simulation exercises, case studies, and self-assessment review, knowledge briefing, classroom presentation, take note as well as a media, including videos, brochures, prevention life skill manuals, while the control group was not received the program. The duration of this study was eight weeks. Data were collected by questionnaires. Pair sample t-test and sample t-test were tested within groups and between group at level 0.05 significance.

Results: the study showed that the experimental group had statistically significant higher an average scores of knowledge and understanding about sexual education than before the experiment and higher than the control group (p-value < 0.001). The creative thinking is critical in their awareness and sympathy for others, the self-confidence, social responsibility, decision making and problem solving, communication and relationships, managing emotions, stress and intentions to protect themselves from unwanted pregnancy had statistically significant higher than before the intervention and control group than before the intervention and control group (p-value < 0.05).

Conclusions: Life skills promotion with five cooperate teaching management process is effective and suggests to promote the adolescence.

Keywords: Life skills, Unwanted Pregnancy, Adolescence, Teenage mother

Effect Of Health Promotion Program Of Stroke Prevention Among Mild Hypertension In Udon Thani Municipality Hospital

Jirawan Dokbauluang1, Pannee Banchonhattakit2
1Khon Kaen University
2Faculty of Public Health

Background: Stroke or Cerebrovascula diseases isa non-communicable diseases that leads to cause of deathin worldwide. This study purposes to examine the effect of health promotion program that applied Self – Efficacy Theory and Social Support to stroke prevention among mild hypertension patients.

Methods: This quasi-experimental research included 70 mild hypertension patients. The sample was divided into two groups, an experimental group (n=35), and a control group (n=35). The experimental group was received a health promotion program by researcher. The Program composed of SKT meditation, exercise with elastic rubber and practice for salty flavorfood control. While the control group did not take part this program. The duration of intervention for 12 weeks. Data analysis included descriptive statistics such as frequency, percentage, mean, and standard deviation and comparative mean scores by using Paired Sample t-test and Independent t-test at level 0.05 significance.

Results: The results revealed that after intervention, the experimental group had significantly higher mean score of stroke knowledge, perceiving a risk of stroke, self-competency in stroke prevention, result expectation in preventing stroke, and practice in preventing stroke than before the experiment and the control group (p-value < 0.001).

Conclusions: This health promotion program are effective and could be applied for stroke prevention among early stage of hypertension patients. A suggestion of a long-term follow-up the patients should be done.

Keywords: Stroke, Cerebrovascula diseases, Self – Efficacy Theory, Hypertension
Background: Myanmar has committed to the progress towards the Universal Health Coverage (UHC) with its core concept of universal access to health services and protection of financial hardship. High out-of-pocket (OOP) payments are the major challenges to achieve UHC as they are one of the access barriers and are the precursors for the catastrophic health spending for the poor. In Myanmar, the ministry of health is currently practicing the OOP reduction strategies e.g. exemption of pregnant women from hospital charges, and medicine supplies to all hospitalized pregnant women.

Methods: It is a cross-sectional study investigating OOP payments including informal payments for Caesarean deliveries among the postpartum women attending a tertiary hospital and a township hospital in Yangon Region, Myanmar. Consecutive sampling technique was applied and exit interviews with 66 discharged patients and their attendants.

Results: Various categories of OOP payments are reported during antenatal period, during hospitalisation and at time of the discharge from hospitals. Significant OOP payments are for medicine, laboratory investigations, operations, transportation and meals. The average OOP payment was 107,427±54,038 kyats (89 US$) in the tertiary hospital and 153,041±64,077 kyats (127 US$) in the township hospital. The difference in the average amount of OOP payments between the hospitals is statistically significant. In this study, donations, envelope payments, tips, treat and gifts are regarded as categories of the informal payments. The average informal payment was 25,717±14,472 kyats (21 US$) in the tertiary hospital and 79,907±46,828 kyats (66 US$) in the township hospital. The difference in the average informal payment is statistically significant. The proportion of informal payment as part of OOP payments is 49 percent in township hospital and 23 percent in the tertiary hospital respectively.

Conclusion: Despite the new counter measures for OOP payments reduction in Myanmar, these OOP and informal payments still exist for several reasons. To be able to alleviate the financial hardship, this study highlights the requirements for appropriate health financing system i.e. prepayment system and equitable promotion of services.
The Relationship Between Learning Status And Knowledge Level In Standardized Training Of General Practitioner In China

Jumin Song1, Weiming Li1, Runsheng Jiang1, Yiqing Mao1, Mei Zhou1, Linxiong Wu1, Bo Tian1, Yao Zhang1, Yanjiao Li1
School of Public Health, Kunming Medical University

Background: To assess the learning status and knowledge level in general practitioner trainees of general practitioners standardized training, then putting forward suggestions to improve the training system.

Methods: We collected a cluster sampling of 6 general practitioners clinical training bases with a total of 225 trainees. The main methods included: (i) Literature review. (ii) Quantitative research with a sophisticated international learning status scale. (iii) Qualitative research with group discussion which were mainly for the talking object in general practitioner training problems and suggestions. Use the multiple steps regression for statistical analysis.

Results: There were differences in learning state between 2 specialized general practitioner standardized training bases and 4 resident standardized training bases taking general practice as one of the professionals (P<0.05). The knowledge level average score was 20.39±5.88 points. The policy awareness score was 4.86±1.54 points, the general theoretical knowledge score was 2.65±1.79 points and the clinical skills knowledge was 12.88±4.32 points. Theoretical knowledge score in 6 bases was less than 60% of the full mark. The score of trainees' learning status and knowledge level were negatively correlated (P<0.05). The total score of learning status increased each point while the knowledge level score was reduced 0.137 times. The reduced personal accomplishment of learning status increased each point while the knowledge level score was reduced 0.451 times.

Conclusion: The learning status and knowledge level in general practitioner trainees are far to optimistic. The general theoretical knowledge is the worst. We still need to further improve the knowledge level by facilitating trainees' learning state. First of all, we should pay more attention to improving the policy publicity approaches and efforts in general practice, improving the sense of belonging of the students. Secondly, teachers of the bases should pay attention to combining different learning states of students with knowledge level to carry out different levels of training in the relevant knowledge.

Key words: general practitioners standardized training; trainees; learning status; knowledge level

This study was supported by the research on general practitioners’ training bases of the Yunnan Provincial Department of finance (Project Code: 6011319)

The Influencing Factor Analysis Of Lahu Nationality’S Health In Lancang County Of Yunnan In China

Ailian Bai1, Liping He1
School of Public Health, Kunming Medical University

Background: Understanding the health status and relative influencing factors of the Lahu nationality residents in Lancang, and provide basis to improve their health.

Methods: This is a cross sectional study. Stratified random sampling method was used to sample. Household surveys were conducted by face-to-face interviews with questionnaire. 565 residents from 181 households who were equal to or more than 16 years old were sampled. The investigation mainly includes the demographic characteristic, health status, economic conditions. The data was analyzed with SPSS 17.0. Using the chi-square test and multivariate unconditional logistic regression to analyze the influencing factors.

Results: The two-week prevalence rate were 15.93% and hospitalization rate were 10.80%. The results of chi-square test: two-week prevalence rates have significant differences between different gender, age, marital status, educational level and economic level (p<0.05). Hospitalization rates have significant differences between different age, marital status and educational level (p<0.05). The influencing factors of two-week prevalence rate were gender, age and economic level. The possibility of two-week prevalence rates were higher in women, low-income and elderly people. The influencing factors of hospitalization rate were whether suffering from chronic diseases and marital status. The possibility of hospitalization rates were higher in chronic patients and divorced or widowed people.

Conclusions: The two-week prevalence rate and the hospitalization rate of Lahu nationality residents in Lancang were high. For two-week prevalence rate, we should pay more attention to women, low-income groups and elderly people. For hospitalization, we should regular physical examination and health education for chronic patients and divorced or widowed people in order to reduce the risk of hospitalization.

Keywords: Lahu nationality Health status Influencing factors
Awareness And Practice On Preparedness And Response For Flood Among Health Staff In Moe Nyo And Padaung Townships, Bago Region

Htoo Myint Swe1, Khay Mar Mya1, Ko Ko Zaw2, Win Thura1
1University of Public Health, Yangon, Myanmar, 2Department of Medical Research, Ministry of Health and Sports, Yangon, Myanmar, 3University of Medicine, Yangon, Myanmar

Background: Heavy rains plus Cyclone Komen caused widespread flooding across 12 out of Myanmar’s 14 States and Regions in June and July, 2015. Moe Nyo and Padaung Townships from Bago Region were also affected by that flood. Exploration of awareness and practice on disaster preparedness and response among health staff from those townships will help the policy makers to improve the disaster management plan.

Aims: To describe demographic pattern of health staff and to determine awareness and practice on preparedness and response for flood among them.

Methods: This study was cross-sectional descriptive study utilizing structured self-administered questionnaires. 141 respondents out of total 177 health staff from Moe Nyo and Padaung townships participated. Study period was from September to December 2015. Data entry and analysis were done with SPSS.

Results: By scoring, 87.9% out of 141 respondents had low knowledge for disaster preparedness and response. Although majority knew that there were Township Disaster Management Plan and Hospital Emergency Plan, only 30.5% saw and heard about disaster drills in their townships and only 14.2% had attended disaster management training and practiced disaster drills. For evacuation, 63.8% knew the specific designated place to go. Although 45.4% knew about triage system, majority did not know the triage colors well. All respondents had poor attitude and bad practice in flood preparedness and response by scoring. Out of 102 respondents, 102 were affected by flood in their hospitals or health centre-covered areas. But, all of them had bad practice in flood preparedness and response by scoring. Out of 102 respondents, all respondents provided routine health care, 98.04% provided water sanitation, 97.1% gave health care in relief camps and coordinated with other organizations.

Conclusion: Majority had low knowledge and all respondents had poor attitude and bad practice regarding disaster preparedness and response. Disaster management training programme should be expanded and disaster drills or simulation exercises should be occurred in their places.

Keywords: Disaster, Flood, Health staff, Preparedness, Response

Title Of Presentation: Assess Understanding About Preventive Doctor Title Of Students In The Public Health Faculty, Hue University Of Medicine And Pharmacy, 2016

Dan Thi Linh Vu1, Chau Nguyen1, An Nguyen1, Huy Nguyen1, Hung Pham1, Ngoc Le1, Ngo Viet Loc1
1Hue University of Medicine and Pharmacy, Vietnam

Background:
Public Health is the bridge between Practical Medicine and patients. Training staff is more and more improving. There have not been had study related to this project which makes it becoming necessary. This study aim to assess understanding toward Public Health Major of students in Public Health Faculty, Hue University of Medicine and Pharmacy in 2016, find the relationship among understanding and researching factors in study population.

Methods:
This is a cross-sectional study. Study population are 681 Preventive Doctor students of regular program of Public Health Faculty, Hue University of Medicine and Pharmacy. Data is collected via a self-filled questionnaires from Mayto July 2016. We will use descriptive statistics to describe understanding towards Preventive Doctor title of students. All analysis will be done by SPSS 20.0.

Results:
Most students have known about Preventive Doctor (93.0%). Although Preventive Doctor was not unfamiliar to students of Preventive Medicine, 48 students had never heard of or known (7.0%). On the understanding of students with preventive doctor title, there were 510 students who did not qualify (nearly 75%). Knowledge of students increased with higher education and by age. Students had families impose discipline when choosing less understand than students without imposing family (the ratio reached 42% compared to students not imposed rate of 76%). Students received information about Preventive Doctor titles from mass media, word of mouth, from the kind of circular, laws, decrees, it had a higher rate of knowledge the students did not receive information from the source on (mass media: 30.7%, not 20.5%, word of mouth: 35.3% gain, not 21.8%, from the circular, laws, decrees: 48%, not 22.8%).

Conclusion:
The results from this study reflected the huge demand for medical education to raise awareness of students about preventive medicine titles. Basically, we suggested to organize lectures, presented for students to have a better understanding of Preventive Doctor titles through reality practical course as well as finding activities work and functions of preventive medicine.

Keywords: Public Health, Understanding, Preventive Doctor, Students, Vietnam.
**ABSTRACT**

Background: Obesity is a risk factor of heart disease, high blood pressure, and type 2 diabetes. The aim of this study was to investigate a behavioral modification program by application of natural therapy on food control and regular exercise for weight control.

Methods: This research is a quasi-experimental research that composed of 74 participants who were divided into two groups: an experimental group (n=37), and a control group (n=37). The intervention of health behavior modification program included learning by media, demonstration, food model, and macrobiotic food handbook. The duration of the program was 12 weeks. Questionnaire is used in collecting data. Data were analyzed by descriptive statistics. Comparative mean scores within groups were tested by paired t-test and between groups were tested by independent t-test at level of significant 0.05.

Results: After the intervention, the experimental group had statistically significant mean scores of knowledge about overweight and obesity prevention, self-regulation to weight control, outcome expectations, and practice to weight-reduction of the experimental group after received a modifying health behavior programs were significantly higher than before interventions and the control group (p-value<0.001) and the mean scores of weight loss, waist and body mass index of the experimental groups after received a modifying health behavior programs were significantly lower than before interventions and the control group (p-value<0.001).

Conclusions: The health behavior modification program is an effective program and suggests to improve overweight control for behavioral change among other nurse aid.

Keywords: Natural therapy, Behavioral change, Overweight, Obesity
Health Literacy And Associated Factors Among Adults In Thuy Xuan Precinct, Hue City, Vietnam

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1Lien Chieu District Hospital
2Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam

Background: In both developing and developed countries, health and social policies are being developed that highlight health literacy (HL) as a key determinant of a person’s ability to optimally manage their health and of a health system’s ability to ensure equitable access to, and use of, services. Therefore, HL has gained considerable attention globally in the recent years. Nevertheless, data on HL in the population is limited for Asian countries, especially in Vietnam. This study aimed to investigate the HL levels and its related factors among adults population in Thuy Xuan precinct, Hue city, Vietnam.

Methods: This cross-sectional survey based on random sampling was conducted in Thuy Xuan precinct, Hue city from October, 2015 to January, 2016. A total of 633 participants aged 18 and older, who lived in Hue during the past 2 years at the time of data collection, were assessed for HL via a face to face interview. HL was measured using questionnaire of HL survey in Asia (HL-Asia-Q), which was modified from the HL survey in Europe questionnaire (HL-EU-Q). We used linear regression to identify factors significantly associated with general-HL (GEN-HL).

Results: The mean health literacy score was 28.78 (SD = 8.69). General-HL index of respondents were inadequate 28.8%, problematic 42.5%, sufficient 23.1% and excellent 5.7%. Findings showed that the limited HL (HL score ≤ 33) were 62.0% in health care, 66.5% in disease prevention and 68.6% in health promotion. Most of demographic and social factors were found to be correlated to General-HL, Health Care-HL, Disease prevention-HL and Health Promotion-HL in univariate model. However, by the multivariate analysis, their general HL scores was significantly associated with educational level, frequency of getting medical-related information on the Internet, kinds of health insurance, periodic health examination, doing exercise, affordability for medication and importance of health.

Conclusions: This study provides insight in the high proportions of limited HL on adults and its related factors, which can be utilized in health awareness and prevention disease programmes.

Keywords: health literacy, adults, risk factor, Vietnam, HLS-Asia-Q
Effects Of Health Education Program And Thai- Esan Folk Media For Behavior Modification Of Liver Fluke Prevention Among Risk Groups Aged 40-60 Years

Tawakorn Prachaiboon1, Pannee Banchonhattakit2

1Student in Master Degree in faculty of public health Khon Kaen University and Research Training Center for Enhancing Quality of Life of Working Age People in faculty of Nursing Khon Kaen University
2Associate Professor, Department of Administration, Health Promotion, Nutrition, Faculty of Public Health, Khon Kaen University

Background: The Northeast or Esan is a regional area that found the highest prevalence of Liver Fluke in Thailand. This study aimed to test the effects of health education program and Esan folk media (mor lum klon) for behavior modification of Liver Fluke prevention among risk groups aged 40-60 years in Phontong district, Roi-Ed province.

Methods: This study was quasi-experimental research and composed of 78 participants who were divided into two groups; an experimental group (n=39) and comparison group (n=39). The experimental group was received by lecture, group discussion, brochure, role playing, modeling, eating behavior guideline, home visiting, and watching esan folk media (mor lum klon) on behavior modification for liver fluke prevention. Data were analysis by statistics percentage, mean, standard deviation, Independent's t-test, and Paired samples t-test for comparison between groups and within group were done at 0.05 level of significance.

Results: After experiment, the experimental group had statistically significant higher of knowledge about liver fluke prevention, perceived severity, response efficacy, self efficacy, practice of the liver fluke prevention more than those before the experiment and the comparison group (p-value<0.001). The perceived susceptibility of the liver fluke prevention had statistically significant higher than those before the experiment and the comparison group (p-value<0.05).

Conclusions: The health education program including the DVD media on local language are effective to change behavior of Liver Fluke prevention in the northeastern Thailand and should be expand to.

Keywords: DVD Media, Behavior Modification, Liver Fluke, Disease Prevention
### Parallel Session: Oral Presentation 3

06 November, 2016, 11:00-12:30

#### Non-Communicable Diseases 1

**Chair:** Assoc. Prof. Prayoon Fongsatitkul  
*Faculty of Public Health, Mahidol University, Thailand*

**Co-Chair:** Dr. Nguyen Van Hung  
*Hue University of Medicine and Pharmacy, Vietnam*

#### Health Promotion 4

**Chair:** Assoc. Prof. Dr. Phitaya Charupoonphol  
*Mahidol University, Thailand*

**Co-Chair:** Dr. Alongkone Phengsavanh  
*University of Health Sciences, Laos PDR*

#### Universal Health Coverage 3

**Chair:** Dr. Jacobs Bart  
*Social Health Protection, GIZ Cambodia*

**Co-Chair:** Assist. Prof. Sok Kanha  
*Department of Planning and Health Information and School of Public Health, Cambodia*

#### Non-Communicable Diseases 2

**Chair:** Prof. Li Yan  
*Kunming Medical University, China*

**Co-Chair:** Assist. Prof. Cui Haixia  
*School of Public Health and University of Health Sciences, Cambodia*

### Program of Oral Presentations

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 – 11:15</td>
<td>OP31</td>
<td>The Economic Burden Of Asthma In Rural Southwest China</td>
<td>Prof. Le Cai</td>
</tr>
<tr>
<td>11:15 – 11:30</td>
<td>OP53</td>
<td>Prevalence Of Iodine Deficiency Disorders: A School Based Study In Aligarh (India)</td>
<td>Prof. Mohammad Aligarh Ansari</td>
</tr>
<tr>
<td>11:30 – 11:45</td>
<td>OP122</td>
<td>Study On Risk Factors Of Recurrence Of Stroke And Interference</td>
<td>Prof. Mei Zhou</td>
</tr>
<tr>
<td>11:45 – 12:00</td>
<td>OP127</td>
<td>The Study Of Relationships Between Fatty Acid Binding Protein, Visfatin Levels And Non-Communicable Chronic Diseases Of The Blang Nationality In Yunnan Province, China</td>
<td>Ms. Songmei Wang</td>
</tr>
<tr>
<td>12:00 – 12:30</td>
<td>OP128</td>
<td>Effects Of Health Education Program On Hypertension Knowledge Diabetes Mellitus Knowledge, Self-Efficacy, And Self-Care In The Community Dwelling Middle-Aged Laotians.</td>
<td>Prof. Younhee Kang</td>
</tr>
</tbody>
</table>
The Economic Burden Of Asthma In Rural Southwest China

Le Cai1, Wenlong Cui2, Jianhui He1, Keying Zhao1
1Kunming Medical University

Background
Asthma affects people of all ages and is a significant chronic health problem worldwide. The prevalence of asthma is increasing in most parts of the world, and imposes perhaps the greatest challenge in developing countries due to its poor control and management. In China, this serious chronic airway disease most greatly affects rural areas, with both the prevalence and mortality of asthma higher in rural areas than in urban areas. This study estimated the economic burden of asthma in a given year (2014) in rural southwest China, including direct, indirect, and intangible costs.

Methods
A prevalence-based cost-of-illness approach was used to estimate the economic burden of asthma. A cross-sectional questionnaire survey of 9,396 consenting adults aged 18 years was used to derive prevalence of as well as the economic consequences of asthma. Years of life lost (YLL) due to asthma was estimated using medical death certificates.

Results
In the study population, the overall prevalence and YLL of asthma was 1.0% and 318.8 years, respectively. Total cost of illness related to asthma was estimated to be $39.83 million, accounting for 2.97% of total healthcare costs in Yunnan province. Inpatient hospitalizations represented the main component of direct costs at approximately $5.59 million. Intangible costs accounted for the largest proportion of the economic costs of asthma at 79.5%. Patients aged 45-59 years incurred the highest amount of indirect costs among the age groups, whereas both direct and intangible costs were highest among patients aged 60 years. Both direct and intangible costs increased with level of education.

Conclusions
Asthma inflicts a considerable economic burden on society in rural southwest China. The region should increase investment in the further control and management of asthma, and improvement of patient quality of life.

Acknowledgements
The study was supported by Major Achievement Cultivation Project Fund of Kunming Medical University (Grant number: CGFY201503).

Keywords: Asthma, economic burden, China

Prevalence Of Iodine Deficiency Disorders - A School Based Study In Aligarh (India)

Mohammad Aligarh Ansari1, M Athar Ansari2
1Aligarh Muslim University,
2J.N.Medical College, A.M.U., Aligarh, India,

Background
Iodine deficiency is one of the most neglected and widespread of all nutritional deficiencies. Deficiency of iodine may result in development of goitre and other iodine deficiency disorders (IDD). The goitre prevalence reflects the iodine deficiency in past while Urinary Iodine Excretion Levels (UIEL) gives the current states of iodine nutrition and both can not be compared at a time. Objectives of the study were: to assess the status of iodine deficiency disorders (IDD) and to assess the status of biochemical iodine deficiency in school children.

Methods
This study was conducted among school children of 1st to 5th standard (6–12 yrs.) from 1st January 2009 to 31st December 2013. A total of 950 students of seven schools were included in the study using proportionate to population size (PPS) method. Each child was examined clinically. We took recommended 10% of urine samples from total children interviewed and tested for estimation of UIEL. Median urinary iodine concentration (µg/l) of 100-199 was taken as adequate. Statistical analysis was done using SPSS version 20.

Results
Age distribution of the study population shows that majority of the students (30.5%) belonged to 11-12 years, and most of the students (56.2%) were males. Only 17 (1.8%) students had goitre. Goitre prevalence was slightly higher (1.9%) in the 6-8 years age group and in females (1.9%). Manifestations of iodine deficiency other than goitre, were retarded growth (0.6%), squint (0.3%), deafness (0.2%). Median UIEL for all children was found to be 140 µg/l. The proportion of children having normal range (>100 µg /l) were 76.7%. Children with mild, moderate and severe grades of UIEL were 7.8%, 5.5% and 10.0% respectively. Prevalence of iodine deficiency in children having UIEL of <100 µg/l, was 23.3%.

Conclusions
Aligarh may be classified as non-endemic for iodine deficiency as the goitre prevalence in school children was only 1.8%, below the 5.0%, required for endemicity. Based on the UIEL values, the area would be categorized as having "No biochemical iodine deficiency". Sustained IEC (Information, Education and Communication) activities should be carried out to sensitize the people regarding IDD.
Study On Risk Factors Of Recurrence Of Stroke And Interference

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ABSTRACT
Background: Stroke is a disease which has high incidence, high recurrence rate, high morbidity and high mortality rates. Recurrent stroke has higher mortality and disability rates than the first. This study aims to explore the risk factors of stroke recurrence and supply a help in secondary prevention.

Methods: The study was based on data from 159 stroke in-patients in the Second Affiliated Hospital of Kunming Medical University from November 2008 to November 2013, retrospective analysis of the imaging and clinical signs and other etiological examination confirmed the diagnosis of recurrent and cases of first stroke in these cases, the epidemiological and clinical features of the patients were examined and recorded.

Results: The recurrence of stroke group 85 cases, the mean age was 64.92±11 years old, includes 49 cases of male, female 36 cases. The primary group 74 cases, the mean age was 62.12±9 years old, include 48 cases of male, female 26 cases. There was no significant difference between recurrent stroke group and first group in gender and age (P<0.05). The results of logistic regression analysis showed that atherosclerosis (OR 15.254 P=0.001); a history of Transient ischemic attack TIA (OR 4.114 P=0.001); smoking history (OR 2.547 P=0.018); family history of stroke (OR 2.417 P=0.045); Low density lipoprotein (OR 1.974 P=0.028); blood pressure (OR 1.703 P=0.006) were the independent risk factors of stroke recurrence.

Conclusion: Atherosclerosis is the chief cause of stroke recurrence. While history of TIA, smoking, family history of stroke, hyperlipidemia and hypertension are important risk factors. In order to prevent the recurrence, it is very important to learn and interfere actively the risk factors of recurrence of stroke.

The Study Of Relationships Between Fatty Acid Binding Protein, Visfatin Levels And Non-Communicable Chronic Diseases Of The Blang Nationality In Yunnan Province, China

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This research is supported by National Natural Science Foundation of China (81360427). To obtain the prevalence of hypertension, dyslipidemia, diabetes, obesity and determine the serum level of Fatty Acid Binding Protein (A-FABP), Visfatin then analyze the factors which may influence the serum level of A-FABP, Visfatin of Blang nationality.

Methods: By the multi-stage cluster and sample randomization method, 458 Blang residents were recruited in this research. Measure the weight, height, waist circumference, hip circumference, visceral fat, body pressure, thickness of subcutaneous fat, body fat ratio. Fasting plasma glucose (FPG), triglyceride (TG), low density lipoprotein cholesterol (LDL-C), high density lipoprotein cholesterol (HDL-C), serum triglycerides (TC) were measured. A-FABP and Visfatin were measured by ELISA method.

Results:(1) Hypertension: there were positive correlation between A-FABP level and diastolic blood pressure of the non-over weigh group of 50~59 years old, there were negative correlation between Visfatin levels and systolic blood pressure, diastolic blood pressure of the overweight group of 50~59 years old., there were positive correlation between Visfatin levels and systolic blood pressure of the non-over weigh group of 60 years old. (2) Diabetes: For the different age and BMI groups, there were no correlation between FPG and A-FABP, Visfatin levels. (3) Obesity: For the 18~49 years old group, there were positive correlation between A-FABP level and BMI and for 50~59 years old group, there were positive correlation between A-FABP, Visfatin levels and BMI. (4) Dyslipidemia: the non-over weigh and overweight group of 18~49 years old, there were positive correlation between A-FABP level and TG; the non-over weigh group of 50~59 years old, there were negative correlation between Visfatin levels and LDL-C, the overweigh group of 50~59 years old, there were positive correlation between A-FABP levels and TC; the non-over weigh group of 60 years old, there were positive correlation between A-FABP levels and TG, LDL-C.

Conclusion: After correlation analysis and hierarchical analysis, we found the correlation between the hypertension, dyslipidemia, obesity and A-FABP Visfatin levels but there were difference with different groups.
Effects Of Health Education Program On Hypertension Knowledge, Diabetes Mellitus Knowledge, Self-Efficacy, And Self-Care In The Community Dwelling Middle-Aged Laotians.

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Background: According to WHO’s NCD Country profiles (2014), infectious diseases remain the greatest causes of mortality in Laos while the burden of non-communicable diseases (NCD) is rising. NCD is estimated to account for 48% of total death in Laos. To make progress on the control of NCD, it is necessary to focus on prevention of NCD. Therefore, there is needs of effective intervention to reduce the main modifiable risk factors including diet, exercise, sedentary lifestyle, smoking, drinking, difficulty in managing stress for NCD.

Purpose: This study aimed to evaluate the effects of health education program on hypertension knowledge, diabetes mellitus knowledge, self-efficacy, and self-care in the community dwelling middle-aged Laotians.

Methods: The design was quasi-experimental with nonequivalent comparison group. The study sample was composed of Laotians aged 40 to 59 years living in Vientiane, Laos who fulfilled at least more than one diagnosing criterion of metabolic syndrome. The study utilized convenience sampling with subjects allocation to experimental and control group. Health education program was only administered to experimental group during the periods between October to December 2015. Data were collected before and after the intervention in both groups. Outcome measures were hypertension knowledge, diabetes mellitus knowledge, self-efficacy, and self-care. The data collected were analyzed by descriptive statistics and inferential statistics with SPSS 21.0 program.

Results: In the study, 113 subjects were included: 48 for experimental and 65 for control group. There were no significant differences on general characteristics between experimental and control group. Also, there were no significant differences in independent variables including hypertension knowledge, diabetes mellitus knowledge, self-efficacy, and self-care between two groups. All of the outcome variables including hypertension knowledge (t=2.84, p<.01), diabetes mellitus knowledge (t=2.0, p<.05), self-efficacy (t=2.71, p<.01), and self-care (t=2.08, p<.05) were higher in experimental group compared to control group after the completion of intervention.

Conclusion: The health education program was effective in improving hypertension knowledge, diabetes mellitus knowledge, self-efficacy, and self-care. The results suggest that the health education program could be further utilized as an effective nursing intervention for NCD prevention in Lao PDR.

Keywords: Hypertension knowledge, Diabetes mellitus knowledge, Self-efficacy, Self-care
Effects Of Behavior Change Model Of Weight Control And Obesity Prevention Among School Children

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Background: Overweight and obesity have been increasing dramatically in children. This experimental study aimed to test effects of behavior change models of weight control and obesity prevention among schoolchildren in the Northeast of Thailand.

Methods: The multi-stage random sampling and inclusion criteria were done. The 159 from 370 students in grade 5 and 6 of six schools were divided into three groups; 51, 62 and 46 students in experimental group 1 (Ex gr.1), experimental group 2 (Ex gr.2) and a control group, respectively. A behavior change model increasing knowledge, self-efficacy, and school lunch program was done in the Ex gr.1, while, the Ex gr.2 was done similar to the Ex gr. and adding parents’ participation. The parents played a role of social support to their children on food intake and physical activity in family. The control group was provided regular school lunch program. The duration of intervention was 16 weeks in the year 2015. The self-administration questionnaire was done. Data were analyzed by Pair sample t-test and ANCOVA with statistical significance at p<0.05.

Results: After the interventions the Ex gr.2 had significantly higher mean scores of attitude, belief, awareness to obesity prevention than the Ex gr.1, while the Ex gr.2 was done similar to the Ex gr. and adding parents’ participation. The parents played a role of social support to their children on food intake and physical activity in family. The control group was provided regular school lunch program. The duration of intervention was 16 weeks in the year 2015. The self-administration questionnaire was done. Data were analyzed by Pair sample t-test and ANCOVA with statistical significance at p<0.05.

Conclusions: The behavior change model that focused on parental support including knowledge, self-efficacy, and school lunch program was done in the Ex gr.1, while, the Ex gr.2 was done similar to the Ex gr. and adding parents’ participation. The parents played a role of social support to their children on food intake and physical activity in family. The control group was provided regular school lunch program. The duration of intervention was 16 weeks in the year 2015. The self-administration questionnaire was done. Data were analyzed by Pair sample t-test and ANCOVA with statistical significance at p<0.05.

Keywords: behavioral modification, obesity prevention, school children, school based intervention
The Effect Of Dental Health Education Program on Behavioral Development Of Care Givers For Dental Caries Prevention Among Pre-School Children On Child Development Center Kongchaitappana Sub-District, Kongchai District, Kalasin Province

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Tooth decay is a common cause of tooth loss in pre-school children. Parents are very important to take care and the dental caries prevention in pre-school children. This quasi experimental research that aims to study the effect of dental health education program on behavioral development of caregivers for dental caries prevention among pre-school children in child development center Kongchaitappana Sub-district, Kongchai District, Kalasin Province. Simple random sampling were 64 parents and divided two group. The experimental group was 32 parents and comparison group was 32 parents. The experimental group received the intervention to 6 times and home visit 4 times in 10 weeks. Include integrating, group lectures, video, small group discussions, demonstration and brushing. The comparison group received regular lessons. Data were collected by questionnaires, brush records, plaque records and plaque index. Data was analyzed by descriptive statistic: frequency, distribution percentage, mean, standard deviation and inferential statistic: paired t test, independent t test at 0.05 level of significantly. The results revealed as follow after the study the experimental group gained significantly higher mean scores in knowledge about dental caries than the comparison group, gained significantly higher mean scores on perceived severity, perceived susceptibility, perceived self-efficacy, perceived outcome expectation of response self-efficacy, practice for the dental caries prevention were significantly higher than those before the experiment and higher than that the comparison group (p-value<0.001), and dental plaque more decrease significantly than before the experiment and less than the comparison group (p-value < 0.001)

Recommendations; It should be encouraged to consumed milk, avoid soft drinks, do not consume sugary foods and snacks in pre-school children. Including to promote brushing after every meal.

Keyword: Dental caries of pre-school children, parents behavioral development.

A Risk Tracing Snowball Approach To Increase HIV Detection

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Background
While overall HIV prevalence in Cambodia has decreased in recent years, the country still needs to focus on increasing access to HIV testing for those who do not know their status and improving early initiation of ART for people diagnosed HIV+. This study is to test whether a risk tracing snowball approach (RTSA) at two NGO clinics results in a higher testing uptake and HIV detection cases than among people routinely presenting at clinics.

Methods
Risk Tracing Snowball was used to detect HIV cases in two NGO clinic from April 2014-December 2015. All newly HIV tested clients (at risk or not, HIV positive or not) were asked to be seeds to identify and refer other five at-risk persons for HIV testing. Both seeds and referred individuals were eligible for getting 2.5 USD for their transportation if referred individuals were screened at risk to HIV. Study populations included everybody who came for HIV testing—general population, men who sex with men, transgender women, people who injecting drug and female entertainment and sex worker—and age 18 years old or older. To control duplication, an online fingerprint system was used. This fingerprint system worked properly in the middle of our study.

Results
During the pilot period, there were 5,990 HIV tests conducted at these two clinics—2,305 self-referred clients, 3,649 clients referred by seeds, and 36 clients referred from community NGOs coming for a confirmatory test. Among tests conducted, new HIV+ identified via RTSA was lower than self-referrals (2.2% vs. 3.3%, p-value=0.028). However, the number of total HIV cases were increased compared to the same 12-month period last year (226 vs 185). Also, the proportion of new cases were about five times higher among those recruited from RTSA than those 24,467 recruited by outreach workers in the community (2.2% vs. 0.44%, p-value<0.0001).

Conclusion
RTSA was a useful approach to identify new HIV cases and was significantly more effective than traditional outreach methods. Further studies should be conducted with the ability to control duplicate testing within clinics themselves and outside the clinics.
Effect Of Body Mass Index Reduction On Normalization Of Prediabetes In An Older Population: A Cohort Study

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Background: Prediabetes is a high-risk state for type 2 diabetes (T2D). Preventing T2D in this stage is important. We explored the contribution of body mass index (BMI) and BMI change on reversion from prediabetes to normal glucose regulation (NGR).

Methods: In a population-based cohort study and without specific intervention in the central of Vietnam, oral glucose tolerance tests were conducted at baseline and at follow-up. In 2013 (baseline), 1724 subjects, aged between 45 and 73 years, were selected for screened for T2D, using multistage probability sampling method; 283 (16.2%) of whom had prediabetes, participated in the follow-up 3 years later.

Results: In multiple linear regression analysis, BMI reduction, but not initial BMI, predicted reversion from prediabetes to NGR. The odds ratio for returning to NGR was 1.43 (95% CI: 1.34 - 1.80) for a BMI decrease of 1 kg/m². Initial BMI had no effect on reversion to NGT (OR=1.05, 95% CI: 0.95–1.16, per 1 kg/m²).

Conclusions: These data suggest that in older adults, reduce BMI increased the chances of reversion from prediabetes to NGR. Initial BMI did not impact on this returning.

Keywords: prediabetes; normal glucose regulation; body mass index.
Factors Influencing Utilization Of Skilled Birth Attendants For Delivery In Gwa Township, Rakhine State, Myanmar

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Background: In Myanmar, maternal mortality is a major public health problem. Three quarters of all maternal deaths occur during delivery and the immediate postpartum. Complications during delivery, including maternal mortality, can be reduced by presence of skilled birth attendant (SBA).

Aims: (i) To investigate mother’s knowledge regarding complications during prenatal, natal and postnatal periods; (ii) To estimate the prevalence of women receiving SBA; (iii) To investigate factors associated with receipt of SBA.

Methods: The mothers of 249 infants, randomly selected from both urban and rural areas of Gwa Township participated in a community based cross-sectional analytic study in September 2015. Knowledge, utilization of SBA and associated factors were obtained from a semi-structured questionnaire. Associations (odds ratio (ORs)) with receiving SBA were estimated in logistic regression and presented with 95% Confidence interval (CI).

Results: Forty-eight percent of women delivered at health facility and 78% received SBA. Only one did not receive at least one antenatal care visit. Fifty-seven percent of the women had knowledge about danger signs, while; 53% had knowledge about importance of receiving SBA. In adjusted analyses, the following factors were associated with receiving SBA: number of antenatal care (OR=4.2; 95%CI=2.0-8.8), knowledge on danger signs and SBA (OR=3.5; 95%CI=1.6-7.6), availability of health facility (OR=4.6; 95%CI=2.0-10.8) and affordability to health facility (OR=2.9, 95%CI=1.4-5.8).

Conclusion: Almost one quarter of women from Gwa Township did not receive skilled birth attendance. The number of antenatal care, knowledge on danger signs and SBA, availability and affordability to health facility were associated with receiving SBA. Health education about danger signs and benefits of delivery with SBA should be promoted. Health facilities should be easily available free of charge.

Keywords: skilled birth attendant (SBA), danger signs, antenatal care, health facility.

Maternal Health Care Services Utilization Among Minority Populations In A Mountainous Area In Central Vietnam

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Background: Growing evidences suggest that there are imbalances in the achievements in health care in Vietnam, especially in the mountainous areas, and particularly among ethnic minority groups. The aim of this study is to describe the determinants of maternal care services utilization and related factors among ethnic minority women in a mountainous area of central Vietnam.

Methods: A cross-sectional study design was conducted in A-Luoi, a mountainous district of Central Vietnam. A total of 381 ethnic minority women preceding twelve months were included in the survey. Preceding the survey, households were interviewed based on a structured questionnaire. Multivariate logistic regression analysis was used to define the significant factors related to adequate antenatal care (ANC) visits.

Results: More than four-fifth (81.1%) of women had undergone at least 3 antenatal care visit during their previous pregnancy. However, there were still 3.1% of women who did not seek any ANC visits. Women in the older age group were more likely to have adequate ANC visits than women who were younger than 20 years old: 20-24 groups (adjusted OR: 3.59, 95% CI: 1.41-9.09), 25-29 groups (adjusted OR =5.595%CI: 2.04–15.23) and 30 groups (adjusted OR = 2.66, 95%CI: 1.21-5.84). In addition, women with higher education were more likely (adjusted OR=2.50, 95%CI: 1.39–4.50) to attend 3 ANC services compared to women who with lower education. Women with good knowledge of maternal health care services (adjusted OR= 5.48,95% CI:3.00-9.9) were more likely to have adequate ANC visits than the women having poor knowledge. Compared with the women who did not receive support from their family, the women who received support were more likely to receive ANC during their pregnancy and giving birth.

Conclusion: There was limitation in approach and utilization of maternal health care among ethnic minority women in mountainous areas in Central Vietnam. The interventions focusing on women in the younger age group, with lower education level, and designed to improve knowledge about maternal health, would be most beneficial.

Keywords: Antenatal care visits, maternal health care, utilization, minority women, mountainous area.
Maternal And Reproductive Health Services Utilization Among The Women Of Reproductive Age In Selected Remote Area Of Myanmar

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Background
Utilization of maternal and reproductive health (MRH) services of the women has a great impact on maternal mortality and infant mortality. In spite of strengthening MRH program, people from remote area still have some limitation to access these services. This study aims to explore their experiences of the reproductive aged women who utilized MRH services last year in selected remote area of Myanmar.

Methods
In 2016, a community-based cross-sectional descriptive study was conducted in Gangaw Township, Magway Region where maternal mortality ratio (1.3 per 1000 live births) and infant mortality rate (89 per 1000 live births) were high. Two stage cluster sampling method was used and 396 reproductive aged women from the randomly selected households participated. Face-to-face interview with pre-tested, semi-structured questionnaires was used. Double data entry was done by EpiData 3.1, presented mainly with descriptive statistics and analyzed by SPSS 20.

Results
Among 396 women, 76.5% were married, 31% were low education level and 15% were youth (15-24 years). Nearly one-fifth of respondents took family planning service and mostly used methods were 3 month injection(49.3%), IUCD(17.3%) and combined OC pills(16%). Family planning service providers were doctors (19.5%), basic health staff (48.1%) and auxiliary midwife (26%). Among the respondents, 7.3% had experience of ANC services and all took from skilled persons. Nearly 60% of the pregnant women received at least 4 visits and more in multiparous women. More than 60% took first ANC visit within first 4 months of gestation and more in youth and women with high education level. Among those who gave birth last year, 55% delivered at public health facilities, 10% at private hospitals and 35% at home. Eighty five percent of deliveries were attended by skilled birth attendants. Only facility based deliveries got postnatal care within 24 hours of delivery by skilled persons. Only two respondents experienced abortion and took post-abortion care from doctors.

Conclusion
This study highlights the current situation of MRH service utilization in remote area of Myanmar and more efforts are needed to improve access and utilization of these services with skilled personnel.

Keywords: MRH services utilization, remote area, Myanmar

Suicidal ideation and associated factors among students aged 13-15 years in association of Southeast Asian Nations (ASEAN) member states, 2007-2014

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Background: The aim of this study was to assess suicidal ideation and associated factors in school-going adolescents in the Association of Southeast Asian Nations (ASEAN) Member States.

Methods: The analysis included 30284 school children aged 13-15 years from seven ASEAN that participated in the cross-sectional Global School-based Student Health Survey (GSHS) between 2007 and 2013.

Results: The overall prevalence of suicidal ideation across seven ASEAN countries (excluding Brunei) was 12.3%, significantly higher in girls (15.1%) than boys (9.3%). Among eight ASEAN countries with the highest prevalence of suicidal ideation was in the Philippines (17.0%) and Vietnam (16.9%) and the lowest in Myanmar (1.1%) and Indonesia (4.2%). In multivariate logistic regression analysis, female gender, older age (14 or 15 years), living in a low income or lower middle income country, having no friends, loneliness, bullying victimization, having been in a physical fight in the past 12 months, lack of parental or guardian support, tobacco use and having a history of ever got drunk were associated with suicidal ideation.

Conclusions: Different rates of suicidal ideation were observed in ASEAN member states. Several risk factors for suicidal ideation were identified which can help guide preventive efforts.

Keywords: suicidal ideation, demographic factors, psychological stress, social environment, Southeast Asia
Sexual assault and other types of intimate partner violence in women in antenatal care and general out-patients, Thailand

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Background: The aim of this study was to assess the prevalence and correlates of sexual assault in the context of intimate partner violence (IPV) in Thailand.

Methods: Adult female participants were systematically screened (self-administered or interview administered) for IPV in antenatal care and general outpatient clinics in nine randomly selected hospitals in two provinces in the central region.

Results: From 14288 women screened, 0.02% were positive for IPV and 207 participated in the study. The mean age of the study participants was 26.8 years (SD=9.3). Fiftyseven women, 27.5% of the sample, reported sexual assault, one or more times, during the relationship in the past 12 months. Most reported some form of psychological abuse (82.1%), physical violence (67.1%) and danger (72.0%). In all, 21.3% reported psychological, physical and sexual violence. Bivariate analyses found that older age, being recruited in the general out-patient department, greater number of children, high psychological abuse, high physical violence, danger and suicidal behaviour in the past 12 months were associated with sexual assault, while in multivariate backward conditional logistic regression physical violence (OR=5.32, CI=2.52-11.24) and suicidal behaviour (OR=3.28, CI=1.37-7.83) were found to be associated with sexual assault.

Conclusions: The study found a moderate rate of sexual assault in intimate violent partner relationships and that sexual assaults are more likely to co-occur with physical intimate partner violence and suicidal behaviour. This knowledge may be helpful in the detection and management of sexual assault in intimate violent partner relationships of women in health care settings in Thailand.

Key words: Sexual assault, psychological abuse, physical violence, danger, intimate partner

Track: Non-Communicable Disease 2
Room: Kravann
Time: 11:00 – 12:30
Chair: Prof. Li Yan
Kunming Medical University, China
Co-Chair: Assist. Prof. Cui Haixia
School of Public Health and University of Health Sciences, Cambodia
Anemia, Iron Deficiency And Thalassemia Among Women Of Reproductive Age Of An Ethnic Minority In Central, Vietnam

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Background: Anemia is one of the public health problems in Southeast Asian countries. It can be found in all age groups including women of reproductive age. Iron deficiency was assumed the main cause of anemia without involving of thalassemia in relation to anemia among minority groups in Vietnam. This study aimed to determine the prevalence of anemia and thalassemia and the main cause responsible for anemia among reproductive age women of the Ta-oi minority group in Thua Thien Hue, Vietnam.

Methodology: A total of 391 the Ta-oi minority women aged 15-49 years was recruited randomly. Blood samples and demographic information were collected from each participant. All blood samples were investigated for anemia and thalassemia. Iron deficiency was determined in anemic cases. Anemia was determined with hemoglobin level less than 120 g/l. The common mutations in Southeast Asia of thalassemia were identified by polymerase chain reaction technique.

Results: Out of 391 reproductive age women, 10% (95% CI 7.2-13.4) was anemic and 56.5% (95% CI 51.4-61.5) carried thalassemia genes. Amongst the anemic cases, proportion of thalassemia, iron deficiency and combined iron and thalassemia were identified in 30 women (76.9%), one woman (2.6%) and 5 women (20.5%), respectively. Of the thalassemic participants, a total of 17 thalassemia genotypes were detected, thalassemia and hemoglobin Constant Spring (Hb CS) were most common with the overall prevalence of 26.6% and 24.3%, respectively.

Conclusion: Prevalence of thalassemia was high and it was the main cause of anemia among Ta-oi minority group. The contribution of iron deficiency to anemia was low. This information may contribute essentiality to anemia prevention and control program in the region with high prevalence of thalassemia.

Keywords: anemia, iron deficiency, thalassemia, Vietnam.

Prevalence Of Dementia And Associated Factors Among The Elderly In Qui Nhon City, Binh Dinh Province, Vietnam

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Background: Dementia is one of the major causes of disability and dependency among older people. Worldwide, 35.6 million people have dementia, with over half (58%) living in low- and middle-income countries. There are very few research on the prevalence of dementia and its related factors in Vietnam. The objectives of this study were to examine the prevalence of dementia among people aged 65 years and over in Qui Nhon city, Binh Dinh province of Vietnam and to examine associated factors of dementia among participants.

Methods: A randomly selected sample of 2359 people aged 65 years and over living in Qui Nhon city, Binh Dinh province of Vietnam were interviewed and examined between January and August 2015. MMSE test (Mini Mental Status Examination) was used as a screening instrument for dementia. Individuals with a MMSE positive (score <24) were examined for diagnosis of dementia using ICD-10 criteria. Multilogistic regression was undertaken for exploring associated factors of dementia.

Results: The overall prevalence estimates for dementia was 7.1% (n=85). This prevalence ranged from 2.3% among people aged 65-69 years to 28.4% among those aged ≥ 90 years. Mean age of onset of dementia was 76.5 years. Only 11.9% of people living with dementia have ever been examined, among which only 40% have received some treatment for dementia. Age, marital status, occupation, education level, medical history of stroke and physical activity were significantly associated with dementia.

Conclusion: In this population, dementia is very common. Mental health care delivery for people living with dementia is urgently needed for the elderly in Vietnam.

Keywords: Dementia, prevalence, related factors, the elderly, Vietnam.
Assessment Of Blood Pressure, Body Weight And Height Among Adult Population In Kyeik-Ma-Yaw Urban Area

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Background: During this decade, epidemiological trend of non-communicable diseases like hypertension and obesity have risen up along with changing socio-economic status and lifestyle behaviors in both developed and developing countries. Among them, (20%) of adult population was affected by hypertension and (34%) of adults were affected by overweight or obesity.

Aim: To assess the blood pressure, body weight and height among adult population in Kyeik-Ma-Yaw Urban area, Mon State, Myanmar

Methods: A community-based cross-sectional descriptive and analytic study in 2010 was conducted among total 185 study subjects who were selected by simple random sampling and face to face interviews were performed by using pre-tested structured questionnaires. Blood pressure, Weight and Height measurements were done by standardized measuring tools on single visit to estimate the proportion of hypertension and that of overweight.

Results: The proportion of hypertension was 16.2% according to (JNC 7) criteria and that of overweight was 11.9% according to WHO classification. The study revealed that hypertension was significantly associated with age (p=0.010), gender (p=0.001), alcohol consumption (p=0.038), meditation practice (p=0.050) and overweight status (p=0.006). And overweight was significantly associated with education (p=0.040), diet pattern (p=0.000), family history of hypertension (p=0.050) and hypertension status (p=0.006). There was also significant relationship between overweight and high SBP (p=0.010) and overweight and high DBP (p=0.000). According to stratified analysis between overweight and hypertension by gender and age, there was statistically significant association in female (p=0.019; ORMH=4.16; 95% CI between 1.82 and 8.25) and 38-57 years age (working age group) (p=0.008; ORMH=4.64; 95% CI between 1.88 and 9.01).

Conclusion: This study highlighted the hypertension and overweight status in Kyeik-Ma-Yaw, Mon State, Myanmar where NCDs related health knowledge such as change the risky lifestyle, dietary pattern should be provided more widely by health education programs, mass media and also health care facilities and services should be strengthened for prevention of NCDs and complications.

Keywords: Blood pressure, Body Weight, Height, Adult, Non-Communicable Diseases
Parallel Session: Oral Presentation 4
06 November, 2016, 14:00-15:15

Non-Communicable Diseases 3
Chair: Prof. Vanphanom Sychareun
University of Health Sciences, Lao PDR
Co-Chair: Dr. Yi Siyan
Center for Health and Population Research, KHANA, Cambodia

Public Health Intervention 3
Chair: Prof. Nay Soe Muang
University of Public Health, Myanmar
Co-Chair: Assoc. Prof. Dr. Tanongsak Yingratanasuk
Burapha University, Thailand

Health Determinant 1
Chair: Assoc. Prof. Vo Van Thang
Hue University of Medicine and Pharmacy, Vietnam
Co-Chair: Prof. Dr. Khay Mar Mya
University of Public Health, Myanmar

Health Determinant 2
Chair: Dr. Twisuk Punpeng
Thammasat University, Thailand
Co-Chair: Assist. Prof. Ly Vanthy
US-CDC, Cambodia office

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 - 14:15</td>
<td>OP133</td>
<td>Comparison of Dietary Behavior and Health Status with Hypertension Risk Factors According to Food Insecurity Status In Lao PDR</td>
<td>Prof. Yuri Kim</td>
</tr>
<tr>
<td>14:15 - 14:30</td>
<td>OP142</td>
<td>The Risk of Traffic Accident Severity from Driver’s Behavior and Defect: Meta-Analysis</td>
<td>Dr. Tanunchai Boonnuk</td>
</tr>
<tr>
<td>14:30 - 14:45</td>
<td>OP166</td>
<td>Prevalence and Cardio-Metabolic Risks Of Overweight And Obese Persons In Mandalay, Myanmar</td>
<td>Dr. San San Htay</td>
</tr>
<tr>
<td>14:45 - 15:00</td>
<td>OP174</td>
<td>Consumption Patterns And Related Problems Of Alcohol among Male Population Aged 15-64 Years In Hakha, Chin State In Myanmar: A Cross-Sectional Descriptive Study</td>
<td>Dr. Mang Cin Tial</td>
</tr>
<tr>
<td>15:00 - 15:15</td>
<td>OP177</td>
<td>Medicine Using Behavior of Type 2 Diabetic Patients Living In A Rural Area Of Thailand</td>
<td>Prof. Benja Muktabhant</td>
</tr>
</tbody>
</table>
Background: Food insecurity has been known to be associated with poorer dietary intake and nutrient inadequacy. Although it has been reported that food insecurity is related with risk for chronic diseases, their relationship remains unclear in developing countries. The purpose of this study was to evaluate dietary behavior and nutrient intake with risk factors of hypertension according to the status of food insecurity in Lao PDR.

Methods: The survey was conducted with 979 people aged 40-59 years old living in 25 urban provinces and 25 rural provinces in four district (VTE Capital-Chanthabuly, Xayseththa, VTE Province-Phonhong, and Tholak-hom) of Laos. Food insecurity status, general demographic information, health status, and dietary behavior were surveyed using a questionnaire. The adopted 18-item USDA (United States Department of Agriculture) food insecurity questionnaire was used for evaluating the status of food insecurity.

Results: Among the subjects, 41.6% were food secure (FS) and 51.9% were mildly food insecure (FI1), and 6.5% were severely food insecure (FI2). FS group had higher living in urban, literacy, education attainment, item ownership, lower number of children, and health enhancing physical activity ($p < 0.05$). Prevalence of hypertension in men was significantly higher in FS group (45.5%) than that of FI groups (FI 1: 32.9%, FI 2: 17.9%) ($p = 0.003$). Hypertension was associated with men living in urban area, college or university education level, having high item-ownership, obesity, waist obesity, and consuming alcohol at least once per week. After adjusting for factors that are related to hypertension and food insecurity, men in FS group were more likely to have hypertension than men in FI2 group.

Conclusion: This study is the first study to evaluate household food insecurity in Lao PDR and food secure men living in developing countries have significantly higher hypertension risk which may be due to westernized diet and lifestyle.

Keywords: Food insecurity, hypertension, dietary behavior, Lao PDR

Background: Road traffic accident was an important public health problem worldwide. The WHO reported that number of people who died from the road traffic accident was about 1.2 million in each year, and the number of accident victims who became disabled increased about 20 to 50 million year by year. This research was aimed at analyzing personal behavior and defects that caused severity of traffic accidents, by taking account the odds ratio resulted from literature systemic review and meta-analysis.

Methods: This study was a cross-sectional and survey research. Meta analysis aimed at presenting situations of road traffic accident in the world, ASEAN and, Thailand. It used the systematic review for study process and analyzed problems by meta-analysis. The searching term of systematic review were ["("dead" OR "death" OR "severe") AND TITLE-ABSTR-KEY("behavior") AND TITLE("accident")]. In the first searching, there were 263 papers, including 257 papers in the Science Direct, 5 papers in the Pub Med, and, 1 paper in the THAILIS. In the last filtering, 3 papers were remained; two papers were found in the Science Direct and, one in the THAILIS. The quality of research was applied in the JBI form. The sample sizes were between 303 to 63,085. Data were analyzed by using statistical fixed effect model and random effect model by testing the significance of the effect size with the odds ratio.

Results: The study results revealed that significant variables were alcohol drinking and not-wearing safety helmet. Those who drank alcohol were 3.225 times at risk to severity of traffic accident than those who did not drink, with statistic significance (ORs=3.225, 95% CI: 1.768-5.885, $p<.0001$). Those who did not wear safety helmet were more at risk for 10.650 times than those who were general passengers (ORs=10.650, 95% CI : 2.141-52.966, $p=.004$).

Conclusions: Not-wearing safety helmet was the highest risk (ORs=10.650) of traffic accident severity, follow by alcohol drinking (ORs=3.225). Therefore, it should determine appropriate strategies to increase helmet wearing and decrease alcohol drinking while driving to reduce the severity of accidents.

Key words: meta-analysis; severity of traffic accident; driver’s behavior; personal defects
Prevalence And Cardio-Metabolic Risks Of Overweight And Obese Persons In Mandalay, Myanmar

San San Htay¹, Htin Soe¹, Aye Lwin²
¹University of Public Health, ²UOPH

Today, changing lifestyle and risky behaviors of tobacco smoking and alcohol consumption are common among Myanmar people. In addition to Myanmar traditional foods being prepared with too much salt and cooking oil, changing of dietary pattern such as consumption of processed foods and beverages become common in urban and rural areas of whole country. Therefore, the prevailing of overweight and obesity, cardio-metabolic risks and non-communicable diseases are not uncommon among Myanmar people.

Community based cross-sectional study was conducted in 2014, to determine the prevalence of overweight and obesity, and to investigate the cardio-metabolic risks among them. Total 1,400 respondents (550 males and 850 females) residing in Mandalay city were included in the study. The related factors were analyzed by Logistic regression and Pearson correlation. Proportion of the overweight and obesity among respondents were 26.3% (95%CI =24.3 - 28.9)[23.1% of males and 28.7% of females] and 15.9% (95%CI =14.1- 17.9)[11.8% of males and 18.6% of females] respectively. In this study, overweight and obesity was associated with gender and age (p <0.05), but not associated with socioeconomic factors and dietary pattern. Among overweight and obese persons, mean values of systolic and diastolic pressure were 128.42 ± 18.16 mmHg and 83.45 ± 28.03 mmHg respectively and mean values of fasting blood glucose and total cholesterol level were 123.36 ± 47.92 mg/dl and 198.07 ± 64.92 mg/dl respectively. Proportions of high blood pressure, high fasting blood glucose and high fasting total cholesterol level were 44.7%, 36.5% and 43.8% respectively. So occurrence of Dyslipidaemia was 58.1%. BMI was positively correlated with systolic and diastolic pressure, fasting blood glucose and total cholesterol level (p <0.001). It was concluded that prevalence of overweight and obesity, and cardio-metabolic risks increased among Myanmar people. In addition to Myanmar traditional foods being prepared with too much salt and cooking oil, changing of dietary pattern such as consumption of processed foods and beverages become common in urban and rural areas of whole country.

Key word: Overweight and obesity, Body Mass Index, Cardio-metabolic risks, Lifestyle modification

Consumption Patterns And Related Problems Of Alcohol among Male Population Aged 15-64 Years In Hakha, Chin State In Myanmar: A Cross-Sectional Descriptive Study

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²Department of Child Health Development, University of Medicine 1, Yangon

Introduction: In Myanmar, every 1 in 4 current drinkers practiced heavy episodic drinking; which is associated with acute consequences such as intentional and unintentional injuries, alcohol intoxication and violence. Increasing alcohol-related problems is also encountered in Hakha so that community actions such as prohibition of OB(white spirits) sales, religious rehabilitation camps for alcoholics has been implemented in Hakha since the last two years ago.

Aim: To determine the magnitude of alcohol drinking, consumption patterns and related problems among 15-64 year-old-males in Hakha Township.

Methods: A cross-sectional descriptive study was done by two-stage cluster sampling method. Total 293 subjects were interviewed by using pre-tested face to face interview questions. Consumption pattern was recorded by using WHO Alcohol Use Disorders Identification Test (AUDIT).

Results: Among the participants, young adults were 46.4% and elderly group 8.5%. Almost all are Chin and Christians. Current drinkers were 64.5% and among them, 48.7% had habit of drinking at home, 61.4% used to drink with friends and drinking without any meal was reported by 21.2%. Nearly half of current drinkers were chronic drinkers (710 years). One third started drinking alcohol before the age of 18 and the two most common reason for drinking was for pleasure and peer influence. According to AUDIT scoring system, 37.01% were hazardous drinkers, 3.74% harmful drinkers and 6.35% possible alcohol dependents. Of the 189 current drinkers, 92 (49%) encountered alcohol-related problems where 72.8% were socio-economic problems. Alcohol drinking was significantly associated with age group (p<0.001) and marital status (p<0.001). Chi-square test for trend showed that alcohol-related problems were more common in higher AUDIT score group (p<0.001). The more risky the drinking patterns, the higher alcohol-related problems. By logistic regression, 19 age group [AOR-8.11(2.27-30.30)] and 20-39 age group [AOR-6.66 (2.26-19.58)] were more likely to drink alcohol than 70 age group.

Conclusion: Study concluded that drinking alcohol among young adult in Hakha is an important issue that needs urgent action to be taken. Hence, primordial prevention activities such as awareness raising programs should be implemented to know the harmful effects of alcohol among school children.

Key words: Alcohol drinking, consumption patterns, alcohol-related problems
Background: Diabetes is a progressive condition which needs continuous prolonged or lifelong treatment. Most diabetic patients require treatment with multiple glucose-lowering medications. This analytic cross-sectional study aimed to investigate medication use behavior of type 2 diabetic patients (T2DM) living in a rural area of Thailand.

Methods: The subjects were 275 T2DM living in Nonglad Sub-District, Waridchaphum District, Sakonnakhon Province, who were recruited by systematic random sampling. An interview questionnaire was used for collecting data on characteristics of the subjects and medicine using behavior. The leftover diabetes pills in each month were counted at the patient's home after interviewing the questionnaire. Data was collected during August to September 2015.

Results: Majority (76%) of the subjects were female with average age 62.1 ± 9.2 years. The average duration of being diabetes of the subjects was 10.6 ± 7.9 years. They received oral diabetes medicine in average 3.2 ± 0.8 items. The average amount of drug left over was 30.09 ± 12.98 tablets/person/month. The majority of the participants (93.5%) obtained ‘moderate’ levels of medication use behaviors. The inappropriate behavior about medicine using was following; not take medicine punctual (one-third of the subjects), taking two doses when they forgot to take in previous time (one-fourth), taking unidentified herbal medicine (one-fourth), and borrowing medicine from their diabetes friends (one-fourth). Factors associated with good behavior in medicine using were having diabetes duration < 10 years (adjusted odds ratio 1.86, 95% CI 1.11, 3.10).

Conclusions: Medicine using behavior of T2DM in the rural area of Thailand was inappropriate which lead to having leftover drugs. Intervention about medicine using should be a priority to implement, especially those patients who have been diagnosed with the disease for a long time.

Key words: Medicine using behavior, type 2 diabetic patients, rural
Exploring the Influence Of Context In A Community-Based Facilitation Intervention On Neonatal Health In Vietnam

Duc Minh Duong¹, Ha Bui²
Hanoi School of Public Health

Background
In the Neonatal health – Knowledge into Practice (NeoKIP) trial in Vietnam, local stakeholder groups, supported by trained laywomen acting as facilitators, promoted knowledge translation (KT) resulting in decreased neonatal mortality. In general, as well as in the community-based NeoKIP trial, there is a need to further understand how context influences KT interventions in low- and middle-income countries (LMICs). Thus, the objective of this study was to explore the influence of context on the facilitation process in the NeoKIP intervention.

Methods
A secondary content analysis was performed on 16 Focus Group Discussions with facilitators and participants of the stakeholder groups, applying an inductive approach to the content on context through naïve understanding and structured analysis.

Results
The three main-categories of context found to influence the facilitation process in the NeoKIP intervention were: (1) Support and collaboration of local authorities and other communal stakeholders; (2) Incentives to, and motivation of, participants; and (3) Low health care coverage and utilization. In particular, the role of local authorities in a KT intervention was recognized as important. Also, while project participants expected financial incentives, non-financial benefits such as individual learning were considered to balance the lack of reimbursement in the NeoKIP intervention. Further, project participants recognized the need to acknowledge the needs of disadvantaged groups.

Conclusions
This study provides insight for further understanding of the influence of contextual aspects to improve effects of a KT intervention in Vietnam. We suggest that future KT interventions should apply strategies to improve local authorities’ engagement, to identify and communicate non-financial incentives, and to make disadvantaged groups a priority. Further studies to evaluate the contextual aspects in KT interventions in LMICs are also needed.

Keywords: Context, facilitation, implementation research, knowledge translation, community-based intervention, focus group discussion, qualitative content analysis, secondary analysis, Vietnam, low- and middle-income countries.

Diet Customs, Diet Pattern and Nutrients Intake of Rural Women during Their Puerperal Period, Yunnan Xuanwei Rural area as an example

Li Yan¹, Bi Xiaoli², Xiao Xia³, Yang Siwei³, Guo Guangping³
1 Kunming Medical University

Background: Chinese women still keep some folk customs in eating during the first month after childbirth, especially in rural areas. Some of the customs may positively affect nutrients intake, but some may not.

Objective: To understand the diet customs, diet pattern and nutritional intake status of puerperal women in rural Yunnan, so as to provide a basis for developing the nutrition improvement strategy for rural puerperal women.

Methods: The total of 20 villages were chosen as study sites by stratified cluster random sampling method. All the puerperal women in sampled villages from July 2014 to June 2015 were engaged in the study. A questionnaire and 3 days 24h retrospective dietary surveys were conducted.

Result: The total of 218 puerperal women with a mean age of 24.38±5.18 years were in the sample. The percentages of women BMI were 14.68% below 18.5, 17.89% in 24.0 and above.

Diet Customs: During puerperal period in Xuanwei rural areas, women normally eat brown sugar, egg, rice and meat. Spicy, raw and cold food was forbidden. Some women did not eat or hardly eat fruit, vegetables, and hard, fish and sour food, etc.

Puerperal women’s daily food intake survey showed that egg was the main food, 208.90g per day on average, and the amounts of eggs, poultry and meat intake were significantly more than recommended intake by China Nutrition Society, especially egg consumption was much more than recommendation. However, the consumptions of grain, potatoes, milk, beans, fish and nut were inadequate. Women did not consumed half recommendation of vegetable, and 92.7% of them did not eat fruit.

Energy intake of puerperal women accounted for 75.01% of recommendation nutrient intake (RNI). The percentage of energy from carbohydrate was only 47.76%, but 14.25% from protein. The intakes of Vitamin A, Vitamin B1, and Vitamin B2, were lower than half of RNI, the intake of nicotinic acid, calcium, iron, zinc, and selenium were inadequate. Vitamin C intake was only 21.24% of RNI. Protein from animal food accounted for 78.09%. The ratio of calcium to phosphorus was 1:1.61.

Conclusions: The folk customs for women in eating during puerperal period are deep-rooted. Food intake of puerperal women is unbalanced, with too much animal food, especially eggs. Amounts of energy and most nutrients intake are inadequate. This study highlight suggests nutrition and health education in terms of women puerperal period need to strengthen.

Keywords: rural women; puerperium; diet pattern; nutrition
Health Literacy And Its Associated Factors Among Outpatients In Hospital Of Hue University Of Medicine And Pharmacy, Vietnam

Tuyen Dinh Hoang¹, Thang Vo Van², yen Luong Thanh Bao³, Tao Tran Thi³, Tuyen Hoang Dinh², Duong Le Dinh²
¹Faculty of Public Health, Hue University of Medicine and Pharmacy
²Department of Biostatistics-Demography- Reproductive Health, Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam

Background: In recent years, health policy and health evidence has strengthened the rights of the patient to make decision in healthcare and manage their own health. Patients should receive adequate information on the health situation and the right to choose health care services. Health literacy is an important factor affecting the information exchange between medical staff and patients with the condition of the patient at the hospital. Therefore, the higher aware of outpatient in health literacy will contribute to higher effect of health management. In Vietnam, there has been some database on health literacy of general population, but there are limited data in the patients, especially outpatients. This study aims to examine the health literacy levels and its related factors among outpatients in the hospital of Hue University of Medicine and Pharmacy in Vietnam.

Methods: This cross-sectional study was conducted in hospital of Hue University of Medicine and Pharmacy in 2016. A sample of 900 outpatients were selected at Hue university hospital at the time we collected data, were examined via a face to face interview by using tablet survey method. Health literacy was measured by short version questionnaire which was modified from the health literacy survey in Europe questionnaire (HLS-EU-Q). We used multiple linear regression to identify factors significantly associated with General-Health Literacy.

Results & Conclusions: The mean General health literacy score was 30.97±6.69. The data showed that the limitation of health literacy were 64.0% in general, 63.8% in health care, 53.0% in disease prevention and 38.1% in health promotion. Findings of this study will help to determine the level of health literacy of outpatients and factors related to the health literacy in this population, which more efficient decision making and patient care.

Keywords: health literacy, outpatients, risk factors, HLS-EU-Q, Vietnam.
### Sexual Risk Factors Among Adolescent: Meta-Analysis

Sunee Kancham¹, Koolarb Rudtanasudjatun¹, Anamai Thetkhathuek¹, Wanasara Chaoniyom¹  
¹Faculty of Public Health, Burapha University

**Background:** Adolescent is the age device by curiosity more than any other age groups. Therefore, adolescent have tendencies to experiment with sex. The study by systematic review and meta-analysis regarding to the issue would help preventing and changing adolescence behaviors which may lighten the age group problems.

**Methods:** This systematic review of literature included 16 articles. The criteria for selecting the research articles were: using keywords as specified by PICO, being cross-sectional research and survey research, and being the research published between 2010-2014. The quality of research articles were evaluated by using the JBI form. The analyses were done by using the Fixed and Random Effect Model. The significant difference of effect size was tested by Odds Radio (ORs).

**Results:** 16 researches pass the selection criteria; there were between 227 to 16,202 samples. The results from 16 previous researches, found four studies about risks in attitude towards sexual intercourse, four studies about drug addiction, 12 studies about alcohol drinking, and two about pornographic media. The effect size of sexual risk factors among adolescent at statistically significant (P<0.001). The effect size, ordered from high to low are alcohol drinking, attitude toward sexual intercourse, drug addiction, and pornographic media, 8.1, 6.8, 5.6, 2.6 respectively (ORs=8.1, 6.8, 5.6, 2.6).

**Conclusions:** Alcohol drinking, attitude toward sexual intercourse, drug addiction, and pornographic media are the problems that need mechanisms to reduce risks among adolescents.

**Keywords:** risk factors, sexual, adolescent, meta-analysis

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 - 14:15</td>
<td>OP148</td>
<td>Sexual Risk Factors Among Adolescent: Meta-Analysis</td>
<td>Mrs. Sunee Kancham</td>
</tr>
<tr>
<td>14:15 - 14:30</td>
<td>OP150</td>
<td>Health Status And Health Care Activities Among Thai And Migrant Workers In Workplace: A View From Saensuk Municipality, Chon Buri, Thailand</td>
<td>Ms. Nareerat Narongwongwattana</td>
</tr>
<tr>
<td>14:30 - 14:45</td>
<td>OP165</td>
<td>After-Shift Musculoskeletal Disorder Symptoms In Female Workers And Work-Related Factors: A Cross-Sectional Study In A Seafood Processing Factory In Vietnam</td>
<td>Mrs. Thu Th Tran</td>
</tr>
<tr>
<td>14:45 - 15:00</td>
<td>OP185</td>
<td>Antibiotic Using In Pig Farming And Implications For Public Health: The Case Of L County</td>
<td>Prof. Jing Fang</td>
</tr>
<tr>
<td>15:00 - 15:15</td>
<td>OP198</td>
<td>Exclusive Breast-Feeding Practices For The First 6 Months Of Age In Hoi An City, Vietnam</td>
<td>Dr. Nguyen Hoang Lan</td>
</tr>
</tbody>
</table>
Health Status And Health Care Activities Among Thai And Migrant Workers In Workplace: A View From Saensuk Municipality, Chon Buri, Thailand

Nareerat Narongwongwattana1, Suwapa Jindawat1, Wanlop Jaidee1, Patchana Hengboriboonpong-Jaidee1
1Faculty of Public Health, Burapha University

Background: Chon Buri province has active tourism, service, commercial and industrial sectors. This area attracts both Thai workers and foreign workers. They migrate from other areas or come across the border, because it provides the strongest economic situation in eastern Thailand. Migrants are also at risk for health problems from their workplace and at their domiciles. This pilot study aims to understand the current health status situation among factory workers. We surveyed the health care activities and studied the differences of the health status and the self-care activities between Thai and migrant workers.

Methods: A cross-sectional study recruited one hundred and forty six workers in five workplaces in Saensuk municipality as our participants. Information was collected about demographic, socioeconomic factors, health status and health care activity by interview questionnaire. We collaborated with the Saensuk municipality officer, the employees and their employer for this project. Thai and migrant workers were selected and invited to participate, we asked for their consent before interviewing. Ethical consideration has been approved by Burapha university ethics committee (No.59/2559) for all our participants.

Results: The results show that 79.6% said they were healthy (84.7% of Thai and 74.7% of migrants). Exercise (35.3%) and eating balanced diet (33.5%) were the most practiced health promotion activities. Most (65.1%) would see the doctor when they got sick, but ten workers (6.8%) would rely on herbal medicines. However, 10.8% of Thai workers pay out of pocket and 16.5% of migrant workers had no health insurance. Income and health insurance were statistically related with health status (p<0.001).

Conclusion: Although Thailand has a Social Security Scheme for both Thai and legal migrant employee, but only 86.2% of our participants had the health insurance. Most of workers were healthy laborers and can take care of themselves by exercise and proper nutrition. The economic factors of sufficient income and health insurance were related with their healthy status because they can pay for their health expenditures. Our recommendations were to promote registration for health insurance, especially for new migrant workers and to develop suitable cost and benefit health insurance program.

After-Shift Musculoskeletal Disorder Symptoms In Female Workers And Work-Related Factors: A Cross-Sectional Study In A Seafood Processing Factory In Vietnam

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1Hanoi school of Public Health
2Centre for Environment and Population Health, Griffith University

Background: The seafood processing industry has been developing and providing marked contribution to Vietnam’s economic growth in recent years. However, information on working conditions and their impacts to workers’ health in this sector, focusing on musculoskeletal problems in female workers, has been poorly documented.

Objectives: This paper examined the prevalence of after-shift musculoskeletal disorder symptoms (A-MSDS) and work-related factors in female workers in a seafood processing factory in Vietnam.

Materials and Methods: As part of a comprehensive study, a cross sectional survey was implemented in one seafood processing factory in the Middle of Vietnam in 2014. A self-administered questionnaire was completed by 394 female workers to collect information about their demographic characteristics, health conditions and work conditions. Descriptive analysis and logistic regression were applied to describe and analyse the results.

Results: Nearly four-fifth of female workers experienced at least one A-MSDS (77.7%) and 20.1% of them had all 5 types of A-MSDS. The prevalence of A-MSDS in different body parts markedly varied, with a proportion of pain in hips and lower extremities being as high as 53.3%, followed by pain in shoulder and upper extremities (42.6%) and neck (41.1%), and humid working environment, exposure to vibration and chemicals as well as disadvantaged task demands and work organizations were found to significantly contribute to the increased risk of after-shift musculoskeletal disorders in different body parts.

Conclusion: Approximately 80% of female workers in the seafood processing factory experienced musculoskeletal pains after work, especially in hips, extremities, neck and shoulder which were contributed by work conditions and task demands.

Keywords: Musculoskeletal disorder symptoms, female/women workers, seafood processing sector/factory, Vietnam, work-related factors
Antibiotic Using In Pig Farming And Implications For Public Health: The Case Of L County

Jing Fang
Institute for Health Sciences, Kunming Medical University

Background
In the last four decades major changes have occurred in pig farming in rural China as the increasing application of new livestock farming technology such as new breeds, feed, vaccination and veterinary drugs, which have profound implications for public health. Among others, the application of antibiotics in pig farming is an increasing but not well regulated phenomena. Studies revealed that samples of pig manure and soil collected from big swine farms in China contained diverse and abundant antibiotic resistance genes. However, not much research was conducted to look into the antibiotic using behaviour of pig farmers. Funded by IDRC, we undertook a research in one county in Yunnan, China aiming at understanding the antibiotic using behaviours of pig farmers.

Methods
L County in Yunnan was selected as the study site where we conducted a household survey in four townships during August 2014 and April 2015 in which 404 farmer households were interviewed by using a questionnaire.

Results
Of the 404 surveyed farmers, scale farmers and smallholder farmers accounted for 21.3% and 78.7% respectively. 83.7 % of the farmers reported that they had the experience of “self-purchasing” antibiotics and 40.3% of the farmers expressed that they “often” use antibiotics in pig farming. Scale farmers are more likely to self-purchase antibiotics. Around 20% of the farmers had the experience of using human antibiotics to treat sick pigs. Scale farmers tend to use more kinds of antibiotics than backyard farmers (P<0.001) and farmers who have more knowledge on antibiotics used more kinds of antibiotics than farmers with less knowledge (P<0.01). Farmers whose livestock previously suffered from disease used more kinds of antibiotics (P<0.001) and farmers who have vaccinated their pigs use more kinds of antibiotics than those who did not (P<0.001).

Conclusion
Antibiotics are widely and frequently used in both scale and smallholder pig farming that increase the risk of microbes resistance and antibiotic residues in pork products. This calls for action to reduce the irrational use of antibiotics in pig farming and to monitor antimicrobial resistance.

Exclusive Breast-Feeding Practices For The First 6 Months Of Age In Hoi An City, Vietnam

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2Health center of Hoi An city, Quang Nam province, Vietnam
3Institute for Community Health Research, Hue University of Medicine & Pharmacy, Vietnam

BACKGROUND: Breast milk is the most valuable source of food for infants, no food can be substituted. However in many countries around the world including Vietnam, the percentage of children with breastfeeding has been declining. A report of the Ministry of Health showed that only 19.6% of infants were exclusively breastfed for the first 6 months of age. The study was conducted in Hoi An with the aim at describing the exclusive breastfeeding practices for the first 6 months of mothers in Hoi An city, Quang Nam province and; and identifying some factors influencing this situation in the study area.

METHODS: A cross-sectional descriptive study was conducted in Hoi An city in December 2014. 516 mothers of infants aged from 6 to 12 months were directly interviewed on the basis of a structured questionnaire. Information about demographic characteristics of mothers and infants as well as socio-economic characteristics of mothers, their knowledge and attitude of breastfeeding and the feeding types of their baby for the first 6 months of life was collected. Multivariate logistic regression model was used to identify factors influencing the first 6 months exclusive breastfeeding

RESULTS: The exclusive breastfeeding rate for the first 6 months is 22.3%. Mothers’ knowledge in breastfeeding and attitude of exclusive breastfeeding are factors that significantly related to the first 6 months exclusive breastfeeding practices of mothers (OR = 3.3; p=0.001 and OR=10.4; p<0.001, respectively)

CONCLUSION: The exclusive breastfeeding rate for the first 6 months in Hoi An city is higher than that of the whole country but is still low. The promoting antenatal education in exclusive breastfeeding is necessary solution to improve exclusive breastfeeding practices for the first 6 months of life

Keywords: breast milk, exclusive breastfeeding, the first 6 months, infants, Hoi An
Participation In Solid Waste Reduction At Rural Household Level In Thailand

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1Faculty of Public Health, Khon Kaen University, Thailand

Background: The solid waste has now a tendency to increase every year, causing odor, a source of diseases and poisonous animals, destroying beautiful scenery with an impact on people’s life quality in the community, also surrounding pollution. Solving the quality in the primary cause is by reducing solid waste and leaving over the least used things for disposal. This research is therefore aimed to study people’s participation in waste reduction at household level by three processes: separation, recycling and reusing.

Methods: This research is a descriptive one with sample groups as 129 representatives of households in Samran sub-district municipality, Khon Kaen province. Data collection was by systematic random sampling: House No. of each village as sampling unit in 23 sampling intervals. The beginning unit got No. 23, and then sought every 23 intervals (House No.) to complete the sample groups from 13 villages. The tools were interviews, 3 choice levels: regular performance = 3 points, sometimes = 2, and never = 1 later. Data analysis was by percentage, mean, standard deviation and 95% confidence interval.

Results: Overall, about half population took part in waste reduction at high level 51.94% and medium level 47.29%. Processes of reduction, most regular practices were: trying the finished use of paper before renewal (2.51±0.55 points, 95% CI: 2.42 to 2.61); buying good-quality products for long use (2.46±0.52 points, 95% CI: 2.37 to 2.55); buying only environment-friendly products (2.33±0.60 points, 95% CI: 2.22 to 2.43); regular processes of reusing: using hankies for tissue (2.36±0.64 points, 95% CI: 2.25 to 2.48); collecting used plastic bottles for reusing (2.21±0.62 points, 95% CI: 2.10 to 2.32). Regular processes for waste separation: separating bottles and cans for selling (2.78±0.44 points, 95% CI: 2.70 to 2.85); separating used paper or books selling to the dealers (2.71±0.49 points, 95% CI: 2.62 to 2.79).

Conclusions: Promotion of people’s participation in waste reduction is the municipality and authorities responsibility to systematically facilitate waste separation with containers, waste bank and purchase of surplus articles at high prices.

<table>
<thead>
<tr>
<th>Time</th>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 - 14:15</td>
<td>OP232</td>
<td>Participation In Solid Waste Reduction At Rural Household Level In Thailand</td>
<td>Mr. Chatchawal Keerativorasakul</td>
</tr>
<tr>
<td>14:15 - 14:30</td>
<td>OP287</td>
<td>The Morbidity Pattern Of Inpatients In Mountainous Area, Central Of Vietnam</td>
<td>Dr. Nguyen Van Hoa</td>
</tr>
</tbody>
</table>
The Morbidity Pattern Of Inpatients In Mountainous Area, Central Of Vietnam

Bao Yen Luong Thanh1, Thuy Le Thi Bich1, Mai Ho Yo Thi Nhu1, Linh Nguyen Thi Khanh1, Thien Hoang Kim1, Vui Tran Van1, Quang Pham Nhut2, Hoa Nguyen Van1

1Faculty of Public Health, Hue University of Medicine and Pharmacy

Background: It can be found the difference in health and health care service between different regions and community residents, especially in mountainous area, the living place mainly for ethnic minorities.

Objectives: To identify the Morbidity Pattern of inpatients at Dakrong General Hospital in the mountainous area of Quang Tri, Central of Vietnam.

Methods: A cross-sectional study was conducted. Data was taken form all health records of inpatients at hospital from 01/01/2011 to 31/12/2015. Inpatient records were diagnosed based on ICD-10.

Results: Morbidity pattern categorized by ICD-10 chapters: chapter XV: Pregnancy, Childbirth and the Puerperium (40.6%); chapter X: Diseases of the Respiratory System (25.8%); chapter XIX: Injury, Poisoning and Certain Other Consequences of External Causes (16.3%); Diseases of the Circulatory System (10.3%); Certain Infectious and Parasitic Diseases (8.4%). The three leading causes of admission were: Spontaneous Delivery (18.2%), Respiratory Inflammation (13.0%), Pneumonitis (12.2%). All of the disease groups: Communicable diseases, Non-communicable diseases and Accidents, Poisoning and Injuries had a tendency to increase through 5 years; and non-communicable diseases had the highest rate of 3 groups. The overall mortality rate was low (0.08%) with a downward trend. Percentage of female inpatients is higher than male (54.9% than 45.1%).

Conclusion: The morbidity pattern of inpatients at Dakrong hospital in 5 years from 2011 to 2015 was quite suitable in Vietnam - a developing country, with particularities were: communicable diseases did not decrease, along with an increasing trend of non-communicable diseases and Injuries.

Keywords: morbidity patterns, general hospital, mountainous area, ethnic minorities, ICD10.
### Poster Exhibition 1

**Time:** 13:30 – 14:00  
**Room:** Exhibition Hall (in front of Ball Room)

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE27</td>
<td>Knowledge, Attitudes And Behaviors About Reproductive Health Of Adolescents Of High School Students At Thua Thien Hue Province</td>
<td>Ms.Thao Thi Phuong Nguyen</td>
</tr>
<tr>
<td>PE33</td>
<td>Knowledge, Attitude And Practice Regarding Prevention Of Sexually Transmitted Infections Among Married Women Of Reproductive Age In Rural Area Of Monywa Township</td>
<td>Mr.Kyaw Htet Aung</td>
</tr>
<tr>
<td>PE84</td>
<td>Characterizing The Relationship Between Climatic Factors And Dengue Fever In Thua Thien Hue Province, Vietnam</td>
<td>Ms. Truong Thi Thuy Dung</td>
</tr>
<tr>
<td>PE35</td>
<td>An Exploration Of Knowledge, Attitudes And Behaviors On Rabies Prevention And Control In Nam Dong District, Thua Thien Hue Province.</td>
<td>Mr.Phu Trieu Phan</td>
</tr>
<tr>
<td>PE200</td>
<td>Incidence And Re-Infection Rates Of Opisthorchis Viverrini In Upper Northeastern Communities Of Thailand</td>
<td>Dr.Kesorn Thaewnongiew</td>
</tr>
<tr>
<td>PE201</td>
<td>Sexual Risk Behaviors To Std And Hiv/Aids Among Male Migrant Workers In Garment Factories In Vientiane Capital, Lao Pdr</td>
<td>Mr.Johnly Phanthady</td>
</tr>
<tr>
<td>PE214</td>
<td>Antibiotic Self Medication For Sexually Transmitted Infections Symptoms Among Service Women In Vientiane Capital, Lao Pdr</td>
<td>Dr.Soudavanh Noy Soysouvanh</td>
</tr>
<tr>
<td>PE218</td>
<td>Factors Associated With Self-Care Behavior Among People With Hypertension In Borlikhamxay Province, Lao Pdr</td>
<td>Dr.Molina Choummanivong</td>
</tr>
<tr>
<td>PE234</td>
<td>Study On Physical Activity And Its Related Factors Among High School Students Of Hue City Application Of The Global Physical Activity Questionnaire</td>
<td>Ms.Hau Thi Kim Tran</td>
</tr>
<tr>
<td>PE251</td>
<td>Prevalence And Intensity Of Soil Transmitted Helminth Infection Among School Age Children In Lamum And Kalum Districts, Sekong Province Lao Pdr</td>
<td>Mrs.Keboousaphone Keo Chindavong</td>
</tr>
<tr>
<td>PE254</td>
<td>Comparison Of Umbilical Cleaning Between Triple Dye And Dry Cord Care In New Born At Central Hospitals, Lao PDR</td>
<td>Dr.Phoutsomphong Tuy Vilay</td>
</tr>
<tr>
<td>PE260</td>
<td>Analysis Of The Health-Seeking Delay Of The Tuberculosis Patient And Its Influencing Factors In High Prevalence Area Of Tuberculosis In Yunnan Province</td>
<td>Prof.Ying Huang</td>
</tr>
<tr>
<td>PE271</td>
<td>The Effect Of Empowermental Program To Stroke Prevention Behaviors Among Hypertension Patients In Tumbon Bankhok Khokphochai District Khon Kaen Province</td>
<td>Mrs.Piyathida Kongnan</td>
</tr>
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<td>Title</td>
<td>Authors</td>
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<tr>
<td>PE38</td>
<td>The Effect Of Resource Management On 1st And 2nd Year Medical Students' Academic Achievements And Their Level Of Depression, Anxiety, Stress At Hue University Of Medicine And Pharmacy</td>
<td>Ms.Man Hue Vo</td>
</tr>
<tr>
<td>PE55</td>
<td>Utilization Of HIV And STI Services Among Female Sex Workers A Case Study Of An Intervention Program In Do Son, Hai Phong In 2014</td>
<td>Dr.Hoang Tu Le</td>
</tr>
<tr>
<td>PE70</td>
<td>Promoting Healthy Feeding Practices Among Caregivers: A Qualitative Study On Knowledge And Perceptions On Responsive Feeding Among Primary Health Care Providers In Rural, Sri Lanka.</td>
<td>Mr.Prabhath Wijitha Kumara Pallewaththa</td>
</tr>
<tr>
<td>PE77</td>
<td>Quantitative Detection Of Pesticide Residues In Urine Of Rural Residents In Yunnan County By Ulpyc Ms/Ms</td>
<td>Ms.Qiuyan Guan</td>
</tr>
<tr>
<td>PE78</td>
<td>The Training And Demand Of Human Resources For HIV/AIDS Prevention And Control In Yunnan Provincial And District Cdc</td>
<td>Prof.Chen Ying</td>
</tr>
<tr>
<td>PE79</td>
<td>Awareness And Practice Related To Environmental Sanitation And Personal Hygiene Of People At Relief Camps In Landslide Area, Hakha Township, Chin State</td>
<td>Dr.Bawi Mang Lian</td>
</tr>
<tr>
<td>PE97</td>
<td>The Effectiveness Of Health Behavior Modification Program For Pesticide Decreasing Among Agriculture, Thailand.</td>
<td>Dr.Chulaporn Sota</td>
</tr>
<tr>
<td>PE98</td>
<td>Disparities In Drinking Patterns And Risks Among Ethnic Majority And Minority Groups In China: The Roles Of Acculturation, Religion, Family And Friends</td>
<td>Dr.Jianhui He</td>
</tr>
<tr>
<td>PE104</td>
<td>Analysis Of Factors Influencing Urinary Arsenic Excretion In Arsenic Exposed And Non-Expose Workers</td>
<td>Ms.Ying Bai</td>
</tr>
<tr>
<td>PE138</td>
<td>Pathways Of Organophosphorus Pesticides Exposure In Children Living In Agricultural Areas : Systematic Review</td>
<td>Ms.Sumaporn Tongprung</td>
</tr>
<tr>
<td>PE47</td>
<td>Sleep Quality Assessment And Association Between Sleep Disorders, Psychological Disorders And Learning Outcomes In Medical Student 2015</td>
<td>Mr.Thanh Nhan Nguyen Phuc</td>
</tr>
<tr>
<td>PE48</td>
<td>Situation Of Traditional Medicine Using, People’s Knowledge, Attitude, Practice And Their Satisfaction In Huong Thay District, Thua Thien Hue Province, Vietnam 2015</td>
<td>Mr.Thanh Nhan Nguyen Phuc</td>
</tr>
<tr>
<td>PE51</td>
<td>Effectiveness Of Self-Care And Self-Regulation Program On Self-Care Behaviors And Blood Sugar Level Among Older Adults With Type 2 Diabetes, Chanthu Buri Province</td>
<td>Ms.Thanawan Pothipak</td>
</tr>
<tr>
<td>PE52</td>
<td>Effectiveness Of Thai Traditional Dance On Exercise Behavior, Level Of Blood Pressure And Cholesterol Among Older Adults With Hypertension, Chanthu Buri Province</td>
<td>Ms.Patita Chamnoongphol</td>
</tr>
<tr>
<td>PE73</td>
<td>A Study Of Rural Residents' Knowledge And Perception Of The National Free Pre-Pregnancy Health Examinations In A County Of Yunnan Province</td>
<td>Mrs.Yingchun Dou</td>
</tr>
</tbody>
</table>
Knowledge, Attitudes And Behaviors About Reproductive Health Of Adolescents Of High School Students At The Thua Thien Hue Province

Thao Thi Phuong Nguyen1, Lien Tran1, Hieu Triang1, Hoa Nguyen1, Trang Luong1
1 Hue University of Medicine and Pharmacy.

Backgrounds and Aims: Reproductive health is an issue becoming imperative for society in general and human health in particular, in which a vitally important aspect is reproductive health for adolescents. Through the years, many programs of reproductive health care for adolescents have been implemented but the effectiveness are still low. This indicates that this is one of the most serious challenges of the development strategy. For these above reasons, we conducted a research study “Knowledge, attitudes and behaviors towards reproductive health of adolescents of high school students in Thua Thien Hue province.

Methods: A cross-sectional survey on 1434 high school students in the province of Thua Thien Hue. A structured interview included questions concerning knowledge, attitudes and behaviors (KAB) of adolescents in relation to reproductive health care. A linear regression model was used for exploring potential factors and controlling confounding.

Results: 13.0% have good knowledge, 67.0% have good attitudes and 73.2% have good behaviors. There were significant relationships between knowledge and region, ethnic, religion, mother’s education level; attitudes and gender; behaviors and region, gender, attitudes.

Conclusions: Most of the students interviewed did not have an intimate knowledge about health productive (87.0%) Therefore, there is an urgent need to strengthen the program, policy and media to help them be fully aware.

Key words: KAB, reproductive health, adolescents, high school students
Knowledge, Attitude And Practice Regarding Prevention Of Sexually Transmitted Infections Among Married Women Of Reproductive Age In Rural Area Of Monywa Township

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¹University of Public Health, Yangon, Myanmar
²University of Public Health

Background: Sexually Transmitted Infections (STIs) are important global health issues. However, they have been neglected as a public health priority. Approximately more than 1 million new cases of STIs occur daily in the world.

Aim: The aim of this study is to explore Knowledge, Attitude and Practice on prevention of STIs.

Methods: A community based cross-sectional descriptive study was conducted in rural area of Monywa Township from September to December 2015. A total of 220 married women were included. Two staged sampling method was used. Face to face interview was conducted using pretested semi-structured questionnaire. To assess the associations between variables, bivariate analyses were done using Chi-square test.

Results: About 98.6% of the respondents had ever heard of STIs, among them 98.6% knew HIV, 52.5% knew Syphilis. Only 8.8% knew Hepatitis B as a type of STIs. Regarding the mode of transmission of STIs, unsafe sex, transfusion with infected blood and vertical transmission were replied by 89.1%, 54.5% and 10.5% of respondents respectively. More than 70% of respondents heard of PMCT. About 83% of respondents replied that condom is one method of contraception that can also prevent STIs. About 52.7% of respondents had positive attitude on prevention of STIs. About 66.5% of respondents took STIs test during last pregnancy. Regarding vaccination, 4.5% of respondents took Hepatitis B vaccine and but only 1.4% took Human Papilloma Virus vaccine. There was significant association between education and knowledge (p<0.001), attitude (p=0.004), practice (p=0.009) and knowledge and practice (p=0.024). Education was postively contributed to the Knowledge, Attitude and Practice of STIs prevention.

Conclusion: Most of the respondents were more familiar with HIV/AIDS than STIs. Awareness raising should be conducted for STIs, PMCT and HPV vaccine among married women through mass media, peer and health staff.

Keywords: KAP, Sexually Transmitted Infections, Rural area, Myanmar

Characterizing The Relationship Between Climatic Factors And Dengue Fever In Thua Thien Hue Province, Vietnam

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¹Hue university of medicine and pharmacy
²Public Health Faculty, Hue University of Medicine and Pharmacy

Background: Dengue is a mosquito-borne viral disease of increasing public-health concern worldwide. Several studies have assessed the impact of weather and climate on dengue in Vietnam and in other parts of the world, which will help providing surveillance and prediction tool for the disease.

Aims: (i) to describe the distribution of Dengue fever in Thua Thien Hue province in 2010-2015, (ii) to explore the influence of climatic factors on Dengue fever cases.

Methods: Case series and ecologic studies were used. Poisson regression was used to examine the association between the incidence of Dengue fever and climatic factors.

Results: During the study period, 6,635 cases of dengue fever were reported. Approximately 86% of cases were reported from July to December. After adjusting for seasonality the incidence of dengue fever was significantly associated with the following factors: The risk of dengue was also associated with elevated temperature (RR: 1.40; 95% CI: 1.36-1.43 per 1°C increase), higher humidity (RR: 1.79; 95% CI: 1.69-1.90 per 5% increase), and higher rainfall (RR: 1.04; 95% CI: 1.03-1.04 per 50 mm increase). The risk of dengue was inversely associated with duration of sunshine, the number of dengue cases being lower as the sunshine increases (RR: 0.79; 95% CI: 0.75-0.83 per 50 hours increase).

Conclusions: These data suggest that rainfall and relative humidity as well as temperature could be used as ecological indicators of dengue risk in Hue. Intensified surveillance and disease control during periods with high rainfall and humidity are recommended. This study may provide baseline information for identifying potential long-term effects and adaptation needs of global climate change on dengue in the coming decades.

Keywords: Dengue fever, Thua Thien Hue province, Vietnam, climatic factors.
An Exploration Of Knowledge, Attitudes And Behaviors On Rabies Prevention And Control In Nam Dong District, Thua Thien Hue Province.

Phu Trieu Phan1, Thi Anh Phuong Pham1, Thi Thu Nguyen1, Quynh Nhu Nguyen1, Thi Thanh Tra Phan1, Thi Thanh H Diep1, Thi Thu Nguyen1, Thi Thanh Nhan Nguyen1
1Hue University of Medicine and Pharmacy

Background: Even though rabies is preventable, it kills 55,000 people around the world each year, mostly in developing countries of Asia and Africa. In 2015, rabies killed 11 people more than in 2014 in Vietnam. Understanding peoples’ knowledge, attitudes and behaviors (KAB) about rabies is very important in order to design appropriate intervention. The study aims to explore KAB about rabies in Nam Dong district, Thua Thien Hue province and obtain factors for current KAB of people about rabies.

Methods: A cross-sectional study a sample of 385 people age from 18 to 70 living in the mountainous district of Nam Dong was performed in 2015 and early 2016. A questionnaire survey was conducted to learn about rabies understanding. Data was analyzed by using SPSS version 18.0

Results: 14.5% of respondents knew that one of the main transmission routes that is direct contact with saliva of a rabid animal. Only 5.5% of respondents knew two or more symptoms of rabies (photophobia, acrophobia, hydrophobia, seizures, and partial paralysis). 9.6% of respondents knew that rabies was fatal once symptoms develop and 88.1% understood that rabies is a dangerous disease. One hundred and twenty one people in total 385 respondents had been bitten by dogs. Around 23.1% applied proper first aid procedures after a bite, 22.3% used chili leaves, 15.7% used superstitious measures and 19.8% did nothing. About 37.9% of respondents received PEP. There is a relation among knowledge, attitude and behavior on rabies prevention. Attitude for rabies prevention related to ethnic, education level and knowing expression of rabies, knowing rabies can be prevented and proper way to prevent from rabies. Behavior on rabies prevention related to ethnic, knowledge on rabies, knowing rabies transmission routes, knowing rabies can be prevented and proper way to prevent from rabies.

Conclusion: Accessing health facilities after a bite is not always considered; the number of people getting PEP remains low while knowledge of first aid procedures and rabies prevention measures are limited. Thus, enhancing peoples’ knowledge, especially for minority groups can play a significant role in reducing rabies infections in Vietnam

Key words: rabies, knowledge, behavior, control, prevention.

Incidence And Re-Infection Rates Of Opisthorchis Viverrini In Upper Northeastern Communities Of Thailand

Dr. Kesorn Thaewnongiew

Kesorn Thaewnongiew1, Piboon Sithithaworn2, Sasithron Tangaawad3, Seri Singtong4, Nitaya Chudthaisong5, Waraluk Tangkanakul6
1Office of Disease Prevention and Control 7 Khon Kaen, 2Faculty of Medicine Khon Kaen University, 3Office of Disease Prevention and Control Region 7, Khon Kaen, 4Nongkai Provincial Health office,

Opisthorchis viverrini prevention and control is a basic measure in reducing the incidence long term cholangiocarcinoma. To evaluate the impact of opisthorchis viverrini prevention and control toward temporary epidemiology of parasitic infection, this research aim to investigate incidence, re-infection rates and risk factors of Opisthorchis viverrini in upper Northeasternt, Thailand. There were 2,674 people in 7 provinces which were Udonthani, Nongbualumpur, Loei, Nongkhai, Bhungkarn, Sakolnakorn and Nakorn Phanom received praziquantel for Opisthorchis viverrini before in 2013. Those people had stool examination by the method of Modified Kato Thick Smer Technique. The prevalence was at 14.3 % and the highest was at Nakorn Phanom (28.6 %). Opisthorchis viverrini incidence in 2014 – 2013 was at 9.0 % (95% CI = 0.08-0.10). The highest of incidence was in Nakornphanom which was at (15.0 %, 95% CI = 0.12-0.19). The second position was at Sakolnakorn (10.6%, 95% CI = 0.07-0.14) and Udonthani (10.1 %, 95% CI = 0.06-0.12) respectively. The re-infection rate of Opisthorchis viverrini was at 5.3 %. The risk factors associated with aspects were, history eating raw fish (OR= 3.2, 95% CI= 2.25 - 4.68), having taken praziquantel (OR= 3.1, 95% CI= 2.07-4.58), and the location of some provinces such as Nakornphanom, Sakolnakorn, Nongkhai and Loei. Thus, the most risk area should be mainly focused. For instance, high quality diagnosis is required to provide medicine and continuously persuade the people not to eat raw fishes.

Keywords: Re-infection rates of Opisthorchiasis, Incidence, Upper Northeasterner
Sexual risk behavior of getting HIV infection among laborers in the big project development has been considerably high, as 22% of the male laborers was reported of having multi sexual partners without condom use. Therefore the surveillance on risky-sexual behavior among these labors is very important in order to help them to reduce the chance of getting HIV transmission and, in consequence, make these labors healthy and being the strong workforce for the country.

A cross-sectional analytical study was conducted to determine the factors associated with sexual risk behaviors of HIV transmission, using face-to-face interview with 305 male migrant workers. Probability simple sampling method were used. The questionnaire consisted of socio-demographic, sexual risk behaviors, health risk behaviors leading to sexual risk behaviors knowledge of HIV/AIDS, perceived risk of getting HIV/AIDS and statistic such as percentage, mean, SD, min, max and Multiple Logistic Regression were used. All data was described with 95%CI and P-value <0.05.

Of 305, 64.2% were in the age range of 20-30 years, mean age was 26 years (SD=6.56), 59.6% were single, 34.7% completed secondary school and upward. Average monthly income was 1,300,000kip, min 500,000 and max 5,000,000. 63.9% were from other provinces and 40% stayed in own house. 54.8% of respondents had sexual risk behaviors, and the most risky-sexual behavior was having multiple sexual partners without condom use, which accounted for 54.4%. This rate of having multiple sexual partner was higher than the national rate of 30%. In the multiple logistic regression, age (OR=2.3; 95%CI=1.0-5.3), marital status (OR=0.2; 95%CI=0.1-0.5), health risk behaviors leading to risky-sexual behaviors (OR=3.5; 95% CI=2.0-6.2) and self-risk-perception of getting HIV transmission (OR=2.1; 95% CI=1.2-3.8) were statistically associated with sexual risk behaviors of HIV transmission (P<0.05). Education, duration of working, income, were not associated with sexual behaviors of HIV transmission risk (P>0.05).

Lao male migrant workers had significant sexual risk behaviors of HIV. Factors associated with sexual behaviors of HIV transmission risk were at the personal factors (age, marital status, health risk behaviors leading to risky-sexual behavior and self-risk-perception of getting HIV transmission).

Keywords: Male Migrant?HIV/AIDS, Sexual Risk Behaviors, Lao PDR

Background: The use of antibiotic self-medication for sexually transmitted infections among service women is estimated to be high, but there is no study on factors influencing in self-medication of antibiotics for STI symptoms among SW in Vientiane Capital. Incorrect diagnosis and inappropriate use of antibiotic could lead to AB resistance continuously.

Methods: A cross-sectional analytical study was conducted with the use of structured questionnaire form to interview 286 service women aged 18 years with STI symptoms during the past 12 months, and who worked at the bar/entertainment shops in six districts in Vientiane Capital. Multiple logistic regression analysis was performed to identify factors associated with AB self-medication.

Results: Among 286 respondents, 278 (97.2%) reported AB use for sexually transmitted infections symptoms during the past 12 months; of these, 191 (68.7 %) reported AB self-medication. The most common of AB use was four tablet set of AB (42%), followed by AB capsules (Kano, Amoxicillin, Ampicillin (39%). Respondents with high awareness on benefits and risks of AB use had 70% less probability of self-medicating with AB than those with low awareness (OR= 0.3, 95% CI: 0.09-0.91, P-value<0.05). Respondents who reported that the reasons for buying AB from private pharmacies due to easy to buy AB, comfortability and shorter waiting time had 90% less probability of self-medicating with AB than those who were close to private pharmacies (OR=0.1, 95% CI: 0.04-0.45, P-value<0.05). Respondents who reported that the reasons for buying AB from private pharmacies due to easy to buy AB, comfortability and shorter waiting time had 90% less probability of self-medicating with AB than those who were close to private pharmacies (OR=0.1, 95% CI: 0.04-0.45, P-value<0.05). Respondents who reported that the reasons for buying AB from private pharmacies due to easy to buy AB, comfortability and shorter waiting time had 90% less probability of self-medicating with AB than those who were close to private pharmacies (OR=0.1, 95% CI: 0.04-0.45, P-value<0.05).

Conclusions: Factors associated with AB self-medication for STI symptoms among service women respondents were low awareness on benefits and risks of AB use, location close to private pharmacies, and advice on benefits of AB from drug sellers, advertisements, friends and parents. Therefore.

Key words: Antibiotic, self-medication, sexually transmitted, service woman Lao PDR

Sexual Risk Behaviors To STI And HIV Among Male Migrant Workers In Garment Factories In Vientiane Capital, Lao PDR

Antibiotic Self-Medication For Sexually Transmitted Infections Symptoms Among Service Women In Vientiane Capital, Lao PDR
Factors Associated With Self-Care Behavior Among People With Hypertension In Bolikhamsay Province, Lao PDR

Molina Choumannivong1, Vongsinnasone Passady4, Hansana Visanou1
1Faculty of Postgraduate Studie, University of Health Science, Lao PDR

Background: The number of patients with cardiovascular diseases is estimated to be increasing in Lao PDR. In addition, cardiovascular disease is responsible for a higher mortality rate. Poor management of hypertension has become a heavy burden on public health care. Self-care behaviors have been documented as one of the main determinants of hypertension control.

Objectives: To identify the factors associated with self-care behavior among high blood pressure patients in Bolikhamsay province, Lao PDR.

Methodology: A cross-sectional survey, with 340 hypertensive patients, was conducted in the Bolikhamsay province, Lao PDR, from October 2014 to July 2015. Participants were mainly recruited from a community health clinic and completed questionnaires assessing their self-care behaviors, including data on socio-demographic, duration of high blood pressure, knowledge and information sources of high blood pressure and self-care behavior. The logistic regression model was used for the analysis of any association between self-care behaviors and independent variables. Self-care was measured by taking antihypertension medication, measuring BP twice per month, avoided salt intake while cooking and eating and engaging in physical activities more often of the week.

Results: 42.0% of respondents were aged 45-55 years old. The proportion of self-care behavior was 18.6%. Factors associated with self-care behavior were sex, as female [AOR=1.5, 95%CI (1.6-1.7)], middle level of education [AOR=2.1, 95%CI (1.1-1.2)], government staff [AOR=2.1, 95%CI (1.2-4.0)], income [AOR=3.5, 95%CI (1.5-38.0)], long duration of hypertension and high blood cholesterol [AOR=3.7, 95%CI (1.1-11.9)] and [AOR=1.5, 95%CI (0.2-0.9)] respectively.

Conclusion: Self-care behavior among hypertensive patients in this study was very low. Thus, more health education should be provided to the people at risk of high blood pressure in order to prevent further complication. Family member should involve in assisting the patients with high blood pressure regarding to the self-care practice.

Keywords: High blood pressure, NCD, Self-care behavior

Study On Physical Activity And Its Related Factors Among High School Students Of Hue City Application Of The Global Physical Activity Questionnaire

Hau Thi Kim Tran1, Hau Tran1, Thuang Tran1, Thuy Phan1, Mai Nguyen1, Mai Tran1, Lan Hoang1, Tuan Tran1
1student of Hue University of Medicine and Pharmacy

Abstract:

Objective: Survey aimed to evaluate level the physical activity of high school students in Hue city and determine its related factors.

Methods: A cross-sectional study was conducted with 385 high school students, utilized the Global physical activity questionnaire (GPAQ) for monitoring physical activity in participants.

Results: 69.6% of responders had well awareness toward the physical activity's benefits, 56.6% of them did not have enough time for physical activity, 18.3% of them spent their free time doing exercises. The average time for physical activity among participants was 579.5 min/week, which is higher in male gender than in female gender (666.8 min/week and 504.1 min/week, respectively). The sitting time in males (467.5 min/day) was less than in females (472.8 min/day). Factors associated with the physical activity gender, were study's results, mode of transport, family economy, support of parents, aware of the physical activity's important.

Conclusion: The result of this study shows that the free time students spending doing regular physical activity was still low. Our findings suggested that, further efforts in improving students' knowledge on the importance of physical activity is very necessary. Further research with more representative sample size will provide more information on the physical activity of Vietnamese high school students.

Keywords: Physical activity, GPAQ, MET, high school students
Prevalence And Intensity Of Soil Transmitted Helminth Infection Among School Age Children In Lamum And Kalum Districts, Sekong Province Lao PDR

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¹University of Health Science

Rational and Justification: Soil transmitted helminthic infection is a major health problem among school children in the globe and developing countries. Especially Lao PDR is high prevalence of intestinal helminthic infections. The intestinal helminthic infection associated with heavy intensity of the parasite affected to the nutrition status of the children such as anemia, vitamine A deficiency which was challenged to improve the MDG 1 in Lao PDR.

Objective: to study the prevalence and intensity of Soil transmitted helminth infection among school children at Lamam and Kaleum district, Sekong province.

Methodology: A cross-sectional analytical study was carried out at two district in Sekong province, 420 children were randomly selected by using multistage sampling technique in four school. Face to face interview by using structured questionnaire were used and stool sample were collected to identify and counting thenumber of parasite’s egg by using Kato-Katz thick smear techniques. The descriptive statistical analysis was used to describe frequency, percentage, mean, SD, min and max of all variables and inferential statistic was used to find the relationship between independent and dependent variables using univariate Logistic Regression and COR, 95%CI and p-value was used. Then Multiple Logistic Regression model was used to predict the factors.

Results: out of 420 were participated in the study. 27.7 % was the prevalence of all intestinal parasitic infection, 25.7% was Soil Transmitted Helminth infection, 75.9% was Hookworm and 21.3% A.lumbricoides and 21.3% T.trichura. The intensity of Soil Transmitted Helminthic infection showed light to moderate classification with mean of eggs per gram were 402.9-1,086.7 eggs/gram, students from Kaleum district, age group 11-14 year olds and finger nails trimming and hand washing after toilet were significant associated with parasitic infection (AOR : 3.7 ; 95% CI : 2.1-6.6 ; P < 0.001), (AOR : 1.6 ; 95% CI : 1.0-2.9 ; P < 0.036) (AOR : 1.8 ; 95% CI : 1.0-2.9 ; P < 0.035), (AOR : 1.8 ; 95% CI : 1.0-2.9 ; P < 0.034) respectively.

Conclusion and Recommendation: Prevalence of Soil Transmitted Helminth in the study was low among this Hookworm infection is higher and Intensity of infections are light to moderate. Therefore, requirement for annual deworming to control and existing health education program should be strengthened in promoting preventive sustaining and to change the behavior and reduce morbidity in the remote area.

Keywords: soil transmitted helminth, intensity, Lao PDR.

Comparison Of Umbilical Cleaning Between Triple Dye And Dry Cord Care In New Born At Central Hospitals, Lao PDR

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Rational: Omphalitis may cause serious complications and contribute to neonatal morbidity and mortality. Umbilical cord cleaning with antiseptics might reduce infection and mortality risk, but has not been rigorously investigated.

Objectives: To compare the umbilical cleaning between triple dye and dry cord care in new born at Mahosot hospital and Mother and children.

Method: A descriptive Cross-sectional study was performed with 200 newborns, starting from 03/03/2015 to 31/6/2015. Two groups were compared by frequency of infection, mean time of cord separation. The first group had the cord wiped and application of triple dye, while the second group had cord wiped and dry cord care. Observation at 48 hours, 7 days and 14 days were made. Differences in the groups were described by mean and frequency and tested for significance using chi-squared and student T-test with P value specified.

Result: A total of 200 new born were studied 100 had dry cord care and 100 had triple dye cord care. Cord separation occurred at a mean 9.69 days for the triple dye group and 6.29 days for the dry cord care group the difference was 3.40 days (P < 0.001).

Conclusion: cleaning cord with triple dye to make times to drop out of the cord shorter than wipe clean with streams dry cord care.
Analysis Of The Health-Seeking Delay Of The Tuberculosis Patient And Its Influencing Factors In High Prevalence Area Of Tuberculosis In Yunnan Province

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Background: After 16 years of DOTS strategy implementation, treatment goal of 85% of DOTS has achieved. This research aims at answering whether the DOTS strategy improved case finding successfully.

Objective: To understand the extent of the health-seeking delay of the tuberculosis patient, and to explore its influencing factors in Yunnan region with high prevalence of TB. Provide evidence for policy maker in term of TB prevention and control.

Methods: Combination method of quantitative and qualitative research was applied in research. Quantitative data came from TB patients medical data system in CDC from October 2014 to March 2015. In-depth interview and focus group discussion were applied to collect qualitative data. Patient delay was defined as more than 15 days from first symptoms occur to first doctors-visiting.

Results:
1. Survey of county median and four percentile delay interval increases with the change of time, delay phenomenon has become increasingly serious.
2. A total of 1163 cases had registered in tuberculosis patients' medical records system during October 2014 to March 2015.
3. The median of health-seeking delay was 60 days, inter-quartile range of health-seeking delay was (35 days,75 days) and the longest delay was 1138 days, the rate of health-seeking delay was 19.6%.
4. 8.3% of the patients delayed less than 2 weeks in seeking medical care, while 13.0% of the patients delayed more than 90 days.
5. Among the 20 interviewed tuberculosis patients, the median of health-seeking delay was 37 days, inter-quartile range of health-seeking delay was (62 days,70 days).
6. The causes for delay include the geographical environment, natural condition, finance, input of human resources, comprehensive capacity of medical staff, implementation and effects of medical training, failure in diagnosis of disease in time by the medical institution, the patient's knowledge awareness of tuberculosis, and medical service radius.

Conclusions: The delay in seeking medical care is common and serious. The local government should pay more attention to the prevention of tuberculosis, especially to detection of patients with TB patient. Increasing input for tuberculosis prevention and making efforts to strengthen the construction of a professional team. Developing encourage policy to detect patients actively.

The Effect Of Empowermental Program To Stroke Prevention Behaviors Among Hypertension Patients In Tumbon Bankhok Khokphochai District Khon Kaen Province

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This a quasi-experimental research aimed to study the effects of empowermental program to stroke prevention behaviors among hypertension patients in Tumbon Bankhok Khokphochai District Khon Kaen Province. The samples were 70 hypertension patients and divied two group, 35 patients were in experimental group and 35 patients were in comparison group. The experimental group received an empowerment program in 12 weeks. The program consisted of a series of integrated activities involving lectures with video, group process, small group discussions, demonstration and practice skills of exercise, stress management, food and drug consumption, home visit by researcher. The comparison group received regular lessons. Data were collected by questionnaires. Descriptive statistic (percentages, means standard deviations) were used to summaries the data, and difference within and between the two groups were analyses using inference statistics. (Paired sample t-test and Independent sample t-test) Statistical significance was set the 0.05 level of, and 95 % CI were computed.

The results: At the end of 12 weeks intervention program shown that the experimental group of mean score higher than before the experimental and higher than comparison group for knowledge of stroke, attitudes about stroke prevention, perceived self-efficacy in the prevention of stroke, practice for stroke prevention and blood pressure levels were lower than before the experiment and comparison groups (p-value < 0.001).

Keywords: Empowermental program in hypertension patients, stroke prevention behaviors
The Effect Of Resource Management On 1St And 2Nd Year Medical Students’ Academic Achievements And Their Level Of Depression, Anxiety, Stress At Hue University Of Medicine And Pharmacy

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Background: Learning resource management skill is becoming increasingly important in improving academic achievement as well as reducing the mental burdens for students during the process of studying. At Hue medical university, the strict training methods and limited facilities have caused many outstanding issues, including the passivity of students in learning and their significant decrease in mental health. That is the reason why there needs to be a comprehensive survey to provide clear evidence to the school authorities and the students for a better understanding about their learning strategies and then take appropriate actions on time.

Methods: Cross-sectional study design is used in this research. A total of 525 students at Hue University of Medicine and Pharmacy, is conducted by stratified sampling methods. Data is collected by interviewing with structured questionnaire. Motivational and Self-Regulated Learning" (MSLQ) and other scales such as the demographic data, Depression – Anxiety – Stress Scale (DASS21), academic achievements were used as tools to assess the effect of resource management on students’ academic achievements and their level of stress, anxiety.

Result: Time and learning environment has a positive correlation to the academic achievement of students (p=0.024). All factors of learning resource management are correlated to the level of depression, apart from seeking help (p=0.83). Effort regulation has a positive correlation (p<0.001) to the stress level of students and peer learning has a negative correlation (p = 0.001) to the stress level of students. No factors of resource management is found correlated to the level of anxiety.

Conclusion: Academic achievement, optimal utilization of time and study environment and self regulation are the factors that are believed to have positive influences on each other. The factors of time, study environment and peer learning are believed to have negative correlation to the level of depression. In contrast, self regulation has a positive correlation to the depression level.

Keywords: resource management, anxiety, depression, stress, learning strategy
**Promoting Healthy Feeding Practices Among Caregivers: A Qualitative Study On Knowledge And Perceptions On Responsive Feeding Among Primary Health Care Providers In Rural, Sri Lanka.**

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**Background**

Responsive Feeding (RF) is an approach to understand your baby's language at feeding situation and it encourages parent and child to connect at meal time, while baby acquires practices to control his or her own appetite. In RF, the reciprocity between the caregiver and the child is conceptualized as a process which consists of four steps. Though RF is listed as the fifth guideline in the Sri Lankan infant feeding guideline, according to recent studies, it has identified that RF is a missed aspect of the national infant feeding program of Sri Lanka. Based on this background the study was conducted to explore knowledge and perception about responsive feeding among Primary Healthcare providers in rural Anuradhapura, Sri Lanka.

**Methodology**

A qualitative study was conducted with caregivers and primary health care providers who were selected purposively. Study was conducted in the Padawiya Medical Officer of Health service area, Anuradhapura. Caregivers were selected to represent different communities and socio-economic backgrounds. Data was collected using in-depth interviews (n=14), diary study with mothers (n=24) and focus group discussions with primary health providers. Data analysis was done using framework approach. Ethical Clearance was taken from the Faculty of Medicine, Rajarata University of Sri Lanka.

**Results**

Awareness on RF was found to be poor among primary healthcare providers and their knowledge on scientific process of RF is not remaining at a satisfactory level. Though they do not have a proper idea on RF they believe that RF is important for child wellbeing. Primary healthcare providers conduct certain programs on complimentary feeding, though they were not tend to intervene on RF in satisfactory level.

**Conclusion**

A well-planned intervention to improve knowledge and address perceptions among primary healthcare providers is required to promote responsive feeding among caregivers.

Key words: Responsive Feeding, Child Nutrition, Child Health

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**Quantitative Detection Of Pesticide Residues In Urine Of Rural Residents In Yuanmou County By UHPLC-MS/MS**

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**Background**

To establish a method to determine the presence and concentration of 18 kinds of pesticide residues in the urine samples of the rural residents in Yuanmou County of Yunnan Province by UHPLC-MS/MS.

**Method**

The urine samples were solid-phase extracted by Waters Oasis MCX and eluted with methanol and methanol solution of 5% aqueous ammonia, after centrifugation and concentration the urine samples were separated on Cosmosil packed column 4.6 i.d.×150 mm column with acetonitrile solution of 0.01% formic acid and aqueous solution of 0.01% formic acid as mobile phase to constant gradient elution. Electrospray ionization source was applied and operated in positive ion mode was adopted. Analyst® Instrument Control Processing Software Version 1.6.2 was employed to the analysis of mass spectrogram.

**Results**

7 kinds of pesticide residues were detected in 230 urine samples, namely carbendazim, iprodione, chlorothalonil, thiram, fenpropathrin, lambda-cyhalothrin and chlorpyrifos with concentration ranging from 0 - 1.0 ?g/mL (µL/mL). The correlation coefficient between concentration and intensity for the 7 compounds is greater than 0.990. 150 urine samples were detected with pesticide residues and the positive rate was 65.22%. Among the 7 pesticides detected, Iprodione was identified in 102 people with a detection rate 44.35%.

**Conclusion**

The detection rates of pesticide residues were high in the urine samples of local residents in Yuanmou County that provides direct evidence of internal exposure of pesticides for local people. The research findings provided a basis for the health risk assessment associated with pesticide occupational exposure.

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Key words: Pesticide Residues, Urine, UHPLC-MS/MS
The Training And Demand Of Human Resources For HIV/AIDS Prevention And Control In Yunnan Provincial And District CDC

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Background: Prevention of AIDS is an important mission for almost every government in the world. In the prevention of AIDS, human resources buildings are the key point to enact polices and achieve the goals of AIDS control and prevention. Yunnan province belongs to one of the high AIDS epidemic areas in China. Although the epidemic situation of HIV/AIDS was controlled, prevalence of HIV/AIDS increases still in recent years, which has made the AIDS prevention become an arduous task. With the prevention work in full swing, the workload for AIDS prevention shows enormous growth and the task difficulty appears to be more prominent than before.

Objective: To assess the existing situation of training and demand human resources for AIDS prevention and control in Yunnan provincial and district Center for disease control (CDC), and to provide evidence for the professional training in the field of AIDS within the government.

Method: questionnaire and qualitative interview were conducted in staff members 1064 Questionnaires were completed, and 20 persons were interviewed. Data management and analysis were carried out using Epidata 3.1 and SPSS 17.0.

Results: In the recent one year, 91.2% provincial and district HIV/AIDS control employees received training. The courses are VCT, epidemiological surveillance, health education and behavioral intervention, and Laboratories. Epidemiological surveillance is the most desired subject to be trained among provincial CDCs in the future. Centralized training courses with lectures given by experts remain the most preferred training formats.

Conclusion: To match China’s increasing investment in HIV/AIDS, strengthen the personnel capacity by enhance the comprehensive HIV/AIDS control skills within the current human resource pool, trainings should be conducted at particular targets with strengthened examination measures. Sound monitor an evaluation measures shall be applied to the outcomes of training programs.

Keywords: Human resources, Training, AIDS

Awareness And Practice Related To Environmental Sanitation And Personal Hygiene Of People At Relief Camps In Landslide Area, Hakha Township, Chin State

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Background: At the end of July 2015, an unprecedented magnitude of landslide, triggered by heavy rains, occurred in Chin State, Western Myanmar and buried three villages in Hakha district, killing over 103 and displacing an estimate of 7,000 people, and made it difficult to support and deliver health services. In disaster, inadequate environmental sanitation and poor personal hygiene can cause illness and death.

Aims: (i) To describe socio-demographic characteristics, awareness and practice related to environmental sanitation and personal hygiene of people at relief camps (ii) To identify association between socio-demographic characteristics, awareness and practice on environmental sanitation and personal hygiene.

Methods: The lists of people aged between 18 and 65 years from all six camps were used as sampling frame. The numbers of samples were selected proportionately according to numbers of encamped people from each camp and the proportionate numbers were randomly selected from each camp making a total of 216 respondents.

Results: The 73.6 percent of respondents had adequate knowledge, 99.1 percent had negative attitude, 95.8 percent had adequate practice and 95.4 percent had good personal hygiene.

For environmental sanitation, though water sanitation, food sanitation and camp compounds were adequate and clean, refuse and excreta disposal were not good enough and the condition of shelter and latrines did not meet the minimum standard of UNHCR.

The older age groups was associated with higher knowledge status, moreover, the higher their education, the better their personal hygiene status, and the higher their knowledge, the more they practiced.

Conclusion: In this study, the negative attitude is high, and condition of shelters and latrines are poor. Health education to change their attitude and provision of facilities to promote environmental sanitation and personal hygiene of people is urgently needed.

Keywords: Environmental sanitation, Personal hygiene, Relief camp, and Landslide
The Effectiveness Of Health Behavior Modification Program For Pesticide Decreasing Among Agriculture, Thailand.

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This study is quasi-experimental research one group pre - post test design aimed to study the effectiveness of health behavior modification program for decreasing pesticide using by applying AIC technique and learning participation among agriculture group in Sawathi Subdistrict, Muang district, Khon Kaen province Thailand. The total of 35 participants at high risk of pesticide using. The sample group was intervened with health behavior modification program by using AIC technique for situation analysis and arrange learning participation lecture by using media and group discussion including various motivation technique. Data collection by using quantitative questionnaire and group discussion. Then data analyzed by using percentage, mean, standard deviation, Paired Samples t-test for quantitative data in addition content analysis for qualitative data.

The result show that after implementation the sample group had mean score of knowledge, and behavior higher than before the experimentation statistically significant (p-value < 0.001) The agriculture group said that most of them used high degree of pesticide for any kind of plants for attractive customers with beautiful vegetable, if no pesticide the product may be damage but after implementation they increase knowledge and much more concern for mankind customer safety. Therefore this program can be applied for decreasing pesticide using among agriculture group in other areas and should be a long-term to implement so they can change behaviors sustainable.

Disparities In Drinking Patterns And Risks Among Ethnic Majority And Minority Groups In China: The Roles Of Acculturation, Religion, Family And Friends

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Background: Studies investigating alcohol consumption related factors have rarely focused on the relationship between acculturation, religion and drinking patterns. Our study hypothesis is that aboriginal culture enculturation is associated with a reduced risk of drinking and mainstream culture acculturation is associated with an increased risk of drinking. Having religious belief and increased perceived risk of alcohol consumption are related to a reduced risk of drinking, while family and friend drinking environment increases the risk of drinking.

Methods: A cross-sectional household survey using a multistage systematic sampling technique was conducted in Yunnan Province of China. A revised Vancouver Index of Acculturation (VIA) and Alcohol Use Disorder Identification Test (AUDIT) Chinese version were used to measure acculturation and drinking patterns. Structural equation modeling (SEM) was used to explore the structures of how predictors affect drinking patterns.

Results: A total of 977 subjects aged 12–35 years were surveyed. A higher percentage of binge drinking was found among Lisu people. However, the proportion of drinking until intoxication was highest among Han. Gender and enculturation had both direct (standardized beta =0.193, 0.079) and indirect effects (standardized beta =0.126, 0.033) on risky drinking pattern; perceived risk of alcohol consumption (0.066), family drinking environment (0.352), and friend drinking environment (0.352) affected risky drinking pattern directly, while education level (0.066), ethnicity (0.038), acculturation (0.012), religious belief (0.038), and age group (0.088) had indirect effects.

Conclusion: Risky drinking pattern was associated with gender and aboriginal culture enculturation both directly and indirectly, and related to mainstream culture acculturation and religious belief indirectly. Other demographic (such as education level) and social family factors (friend drinking environment for example) also had effects on risky drinking pattern.

Keywords: Risky drinking, Ethnic groups, Acculturation, Religion, Social drinking environment
OBJECTIVES: This study was designed to evaluate the influence of occupational and non-occupational factors on urinary arsenic excretion in workers exposed and non-exposed to iAs (inorganic arsenic).

MATERIALS AND METHODS: The study covered a group of 39 exposed to iAs workers (mean age: 41.9 yr; SD=7.7; range: 22-59 yr) whom employed in an arsenic factory, their employment duration ranged from 0.5-24 years and 106 non-exposed to iAs workers matched for gender, age, and employment duration, whom employed in a concretes factory, both factories locate at City of Mengzi in Province of Yunnan of China. Urinary arsenic (iAs and its methylated metabolites) excretion in 145 urinary samples were measured by Hydride Generation Atomic Fluorescence Spectrometry (HG-AFS).

RESULTS: Urinary arsenic concentrations in workers exposed to iAs ?the median was 282.62 microg/l and in non-exposed to iAs workers, the median was 55.72 microg/l, respectively. There were significant differences in urinary arsenic excretion between the arsenic exposure group and the non-exposure group (P < 0.05). The median urinary arsenic contents for male and female were 323.94/2/L and 186.34/2/L. mengzi some men and women of arsenic factor worker indiscriminate urine arsenic content (P > 0.05), urinary arsenic content and length of service is not relevant (P > 0.05), and were not associated with age (P > 0.05), no difference between urinary arsenic in each type of work. The median urinary non-exposed to inorganic arsenic contents for male and female were 56.61 mu g/L, 47.76 mu g/L, but there was no difference in the male and female worker urine arsenic (P > 0.05), urinary arsenic and were not associated with age (P > 0.05)

CONCLUSION: Recommended MENGZI adult urine arsenic of the upper limit of normal reference value of 124.03 mu g/L; Professional urinary arsenic concentration of arsenic exposed workers was obviously higher than that of the occupational exposure workers in urine arsenic concentration (P < 0.05); The findings of the study indicate that urinary arsenic concentrations in workers exposed to iAs can be used as an indicator of exposure to evaluate arsenic occupational exposure.

Keywords: Urinary arsenic; non-occupational arsenic exposed; Hydride Generation Atomic Fluorescence Spectrometry (HG-AFS)
47
Sleep Quality Assessment And Association Between Sleep Disorders, Psychological Disorders And Learning Outcomes In Medical Student 2015

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Background and Objectives: Sleep disorder is a problem that is becoming popular in the current society, especially youth generation, greatly affected on human health, this study aimed to find out the status, quality of sleep and termites association between sleep disorders and psychological disorders as well as learning outcomes in students of Hue University of Medicine and Pharmacy.

Methods: A cross-sectional study with a randomly selected sample of 450 students at Hue University of Medicine and Pharmacy, K10 scale was used for distress identification and PSQI scale was used for examining the sleep quality. We also collected learning outcomes of student in 2014-2015.

Results: The proportion of students with sleep disorders is 53.3%. Correlation with statistical significance between sleep disorders with coffee, tea, soda water, tonic water using before going to sleep (p <0.05). Correlation with statistical significance between sleep disorders and psychological disorders (p <0.05). There was an association with statistical significance between sleep disorders and academic classification (learning outcomes) (p <0.05).

Conclusions: The study has raised disturbing is the status of the quality of sleep, determined to be the effects on health and the quality of learning; research results set out requirements for the measures to reduce the state of disorder sleep disorders as well as the harmful effects of this problem.

Keywords: K10, PSQI, psychological disorders, sleep quality…

48
Situation Of Traditional Medicine Using, People’S Knowledge, Attitude, Practice And Their Satisfaction In Huong Thuy District, Thua Thien Hue Province, Vietnam 2015

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Background: Beside the development of modern medicine, traditional medicine has an important role and increasingly becoming the first choice of the patient with the advantages such as inexpensive, easy to apply, has few side effects … But people still do not realize the importance of health care in traditional medicine as well as lack of knowledge and access to health care services by traditional medicine locally.

Objectives: Assessment of people’s understanding of health care services by traditional medicine in health facilities and (ii) to explore several factors impact on traditional medicine using of the people.

Methods: Combining quantitative and qualitative research. A cross-sectional study with a randomly selected sample of 645 adult patients whose medical treatment at health commune center in Huong Thuy district, Thua Thien Hue province. Depth interviews were conducted with some research subjects.

Results: 68.8% choose commune health center as the first place to receive treatment, because of “health insurance” with 37.8%. Two-thirds of people examined at commune health centers have used traditional medicine in the previous treatment. And 74% is using traditional medicine at the moment. Most of source of information from health workers, when they do medication with patients with 53.5%. 47.9% patients are planting herbal (Vietnamese traditional medicine) on their garden. The main reason for using: 33.3% because of “easy using and easy apply at home” , “good for health and few side effects” with 14.5%. Satisfaction rate when using health care services accounted for 85.5% with traditional medicine. There is significant correlation between education levels and a choice of traditional health care, and a choice between age group of health care with traditional medicine.

Conclusion: Promote communication - health education in all its forms, to improve knowledge for the community; Integrated into community activities such as community meetings, women’s association, farmer association, youth union … Dissemination of knowledge about health care with traditional medicine, growing and using herbs at home.

Keywords: Vietnamese tradition medicine, herbal, medical
**$1$**

**Effectiveness Of Self-Care And Self-Regulation Program On Self-Care Behaviors And Blood Sugar Level Among Older Adults With Type 2 Diabetes, Chanthra Buri Province**

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This quasi-experimental research was aimed to study the effects of self-care and self-regulation program on self-care behaviors and blood sugar level among older adults with type 2 diabetes. Sixty older adults with type 2 diabetes participated in this study, were equally randomized-divided into either a treatment group or a control group. Thirty older adults were in each group. Research tool consisted of three parts: self-care and self-regulation program, questionnaires and blood glucose examination. The data were analyzed by using descriptive statistics, independent samples t-test and repeated measure anova.

The results showed that after 11 weeks and 16 weeks in the experimental group, the average score of eating behavior was higher than the average score of the control group, respectively (t = 7.078, p < 0.001) (t = 8.246, p < 0.001), the average score of exercise behavior was higher than the average score of the control group, respectively (t = 4.013, p < 0.001) (t = 4.847, p < 0.001), and the average score of blood sugar level was lower than the average score of blood sugar level of the control group, respectively (t = -13.646, p < 0.001) (t = -13.143, p < 0.001).

In conclusion, the effect of self-care and self-regulation program could improve eating behaviors, and exercise behaviors, and could reduce blood sugar level. Therefore, health care providers both in the hospital and the community can apply this program to promote health in other diabetes patient group.

Keyword: Self-care and Self-regulation program, Self-care behaviors, Blood sugar level, Older adults with type 2 diabetes

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**$2$**

**Effectiveness Of Thai Traditional Dance On Exercise Behavior, Level Of Blood Pressure And Cholesterol Among Older Adults With Hypertension, Chanthra Buri Province**

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The quasi-experimental research was aimed to study the effects of Thai traditional dance on exercise behavior, level of blood pressure and cholesterol among older adults with hypertension, Chanthra Buri province. Seventy older adults with hypertension participated in this study, were equally randomized-divided into either a treatment group or a control one. Thirty-five older adults were in each group. Research tool consisted of two parts: Thai traditional dance on exercise program and questionnaires. Data were analyzed by using descriptive statistics, paired samples t-test, independent samples t-test and repeated measure anova.

The results showed that after 10 weeks and 16 weeks in the experimental group, the average score of exercise behaviors was higher than the control group, respectively (t = 14.727, p < 0.001) (t = 14.585, p < 0.001), the average score of systolic and diastolic blood pressure were lower than the control group, respectively (t = -4.260, p < 0.001) (t = -4.631, p < 0.001) and (t = -6.103, p < 0.001) (t = -6.374, p < 0.001). For the average score of triglycerides and LDL cholesterol after 16 weeks in the experimental group were lower than the control group, respectively (t = -3.752, p < 0.001) (t = -2.455, p < 0.001), and the average score of HDL cholesterol was higher than the control group (t = -2.931, p < 0.001).

In conclusion, the effect of Thai traditional dance exercise program could improve exercise behaviors and could reduce blood pressure and cholesterol level. Therefore, health care providers both in the hospital and the community can apply this program to promote health in other hypertension patient group.

Key word: Thai traditional dance on exercise, Exercise behavior, Blood pressure, Cholesterol, Older adults with hypertension
**A Study Of Rural Residents’ Knowledge And Perception Of The National Free Pre-Pregnancy Health Examinations In A County Of Yunnan Province**

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Background: With the social development and progress of medicine, human disease spectrum has occurred significant changes, birth defects and a range of issues increasingly prominent, becoming an important social issues of affecting the quality of population, economic development and global of important population health issue. In order to prevent the occurrence of birth defects, in 2010, China has proposed the National Free Pre-pregnancy Health Examinations (NFPHE) and pilot implementation, achieved full coverage. In 2013, NFPHE is provide free health examinations for plan to pregnant couple by health education, clinical laboratory etc., improve them scientific knowledge, prevention occurrence of birth defects and promote prenatal and postnatal care, it is recognized as a public health service with low input and high output effect, Effectively reduce birth defects and other adverse pregnancy outcomes occur. But, in 2013, the country gradually began to combination health and family planning system. In this new administrative system, how to integrate resources and better carry out the NFPHE program is the current problems to be solved. This study is investigate rural residents’ knowledge and perception of the NFPHE to better carry out the NFPHE in the new context of combination of health and family planning system.

Methods: A self-designed questionnaire was used to investigate rural residents’ knowledge and perception, including whether they know this examination, the channels of knowing and willingness to use the service etc. A total of 583 residents in the county were surveyed.

Results: 50% of the surveyed rural residents know about the NFPHE, people in different age groups and living with different distances to county town have different knowing rates with older age groups and those who live far away township have better knowing rates of the NFPHE, the differences are statistically significant (p<0.05). The rural residents’ acceptance to the project is high with 93.7% of them willing to participate in the examination.

Conclusion: only half of the surveyed local residents know about the NFPHE. We should strengthen information dissemination of the NFPHE and broaden communication channels to raise people's knowledge and improve the service utilization.

Keywords: National Free Pre-pregnancy Health Examinations; Rural residents; Knowledge and Perception

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**Microbial Quality Of Bottled Drinking Water In Mandalay**

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Waterborne disease is easily transmitted when contaminated water is used for drinking. This study was performed to determine the microbial quality of bottled drinking waters distributed in seven townships of Mandalay from January to September 2015. The main objectives were to determine the faecal contamination of water by testing total coliforms and standard plate count, to isolate and identify Streptococcus faecalis and Clostridium perfringens and to determine the satisfactory level of microbial quality of bottled drinking water. Randomly purchased 150 bottled (1 litre) drinking waters were tested for total and faecal coliform and Escherichia coli by multiple tubes method, Streptococcus faecalis and Clostridium perfringens by culture, and standard plate count. In this study, 98 (65.33%) samples were positive for presumptive coliform test, 38 (25.33%) samples were positive for differential coliform test but Escherichia coli was confirmed in only 1 (0.66%) sample. Six (4%) samples were positive for Streptococcus faecalis and this showed the strong relation with faecal contamination, and 9 (6%) samples were positive for Clostridium perfringens which represent the faecal contamination from remote period. According to most probable number (MPN) of coliforms calculated from McCrady's table, 52 (34.66%), 26 (17.33%) and 13 (8.66%) samples showed >500 CFU/ml. Aung Myat that Zan township had the highest acceptable rate (<100 colony forming unit), and Pyi Gyi Ta Gon and Pathein Gyi townships yield the lowest acceptable rate. Therefore, this study elicited the occurrence of faecal contamination of bottled drinking waters distributed in seven townships of Mandalay and following percentages of bottled drinking waters examined were assumed as unsafe for drinking purpose. The results raise the concerns regarding the quality of bottled drinking water and highlights the danger posed to the public health. Recommendation was suggested for periodic monitoring and investigation of bottled drinking water brands distributed from markets randomly to prevent water borne infections.
Determination Of Heme Iron In Foods By Flame Atomic Absorption Spectrophotometry

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Abstract
Background—Many animal studies and human studies found that heme iron can increase the formation of N-nitroso compounds, which are known carcinogens. Flame atomic absorption spectrophotometry was established for the determination of the heme iron in foods.

Methods—The heme iron in foods was extracted with acid acetone (acetone:H2O:HCl=80:10:10), the extracts were digested by a concentrated nitric acid and perchloric acid (4:1 V/V) at normal pressure, and the contents of heme iron was measured by FAAS method. The optimum condition was that the slit width was 0.4nm, lamp was 4mA, air-acetylene combustion ration was 15/2, burner height was 7.5mm.

Results—Under this condition, the linear equation was A=0.02546C+0.14138, correlation coefficient r was 0.9990, the RSD(%)<0.71. The addition standard recovery was 95.18%~101.81%. The detection limit of heme iron was 0.023µg/ml.

Conclusions—The method is scientific, reliable, with high accuracy, convenient operation, good stability and good reproducibility. This method has good application potential in Chinese Food composition analysis.

Keywords: heme iron, acid acetone, flame atomic absorption spectrophotometric method

Assessment Of The Quality And Laxative Effect Of Lactobacillus Paracasei In Buffalo Milk Yogurt

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Abstract: Background: This study was conducted to evaluate the laxative effect of lactobacillus paracasein in buffalo milk yogurt and its quality. Lactobacillus paracasein, lactobacillus bulgaricus and thermophilic Streptococcus thermophilus were used to ferment buffalo milk. Viable bacteria counts, pH values, acidities, viscosities, sensory indices were tested and recorded in 1 d, 7 d, 14 d, 21 d. In order to explore the improvement of the LYO 50 DCU-S used as a subsidiary starter in the production of milk yogurt, the lactobacillus Paracasein, lactobacillus bulgaricus, thermophilic Streptococcus thermophiles fermented buffalo milk yogurt was compared with that by YO-MIX(- lactobacillus bulgaricus and thermophilic Streptococcus thermophilus).

Methods: Male Kunming mice were randomly divided into blank group, model control group, control group and three does groups. Constipation model was induced by means of compound diphenoxylate.

Results: After 7 days of administration of lactobacillus Paracasein in buffalo milk yogurt, the averaged first defecation time of mice was shortened. After another 7 days, the ink propelling rate was significantly increased.

Conclusions: The results indicate that the application of Lactobacillus Paracasein LYO 50 DCU-S as a subsidiary bacteria in the production of buffalo milk yogurt is feasible, and strain LYO 50 DCU-S can notably improve the laxative effect in constipated mice.

Keywords: Lactobacillus paracasein LYO 50 DCU-S; Fermentation agent; defecation
A Kap Survey Of Nutrition Labels In 2 Colleges Of Kunming

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Objective: To understand the KAP on nutrition labels in college students and explore the associated factors.

Methods: A random sample of 330 college students was investigated by self-designed questionnaire about nutrition labels.

Results: The average of nutrition knowledge score was 11.528±2.95. The scores of medical students were higher than non-medical students (F =60.117 , P =0.000) and along with the grade higher, the nutrition knowledge score was higher(F =39.819 , P =0.000). 90.1% students believe that nutrition labels were identified on the nutritional content. 87.3% of the students thought that was necessary to food labeling nutrition labels. 87.6% of college students read nutrition labels when they buy food. 62.7% of college students had experiences of purchasing decision making by reading nutrition labels. Non-medical students had garnered 3.244 times as many reading rate about the nutrition labeling as medical students, these students whose nutrition knowledge score passed had garnered 2.151 times as many reading rate about the nutrition labeling as others, these students who trust nutrition label had garnered 6.752 times as many reading rate about the nutrition labeling as these who didn’t trust.

Conclusion The nutritional knowledge of in university students is poor. Profession, nutritional knowledge score and trust degree of nutrition labels may affect the reading behavior of university students.'

A Survey Of Health-Related Behaviors And Health Risk Behaviors Among Icu Nurses Of 10 Tertiary Hospitals In Yunnan Province

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[Objective] To assess the physical and mental health status among ICU nurses in Yunnan Province, and to explore the effect of health behaviors on physical and mental health.

[Methods] A total of 311 nurses from 10 tertiary hospitals were selected as study subjects. Short-form general Physical and Mental Health Scale (SF-8) was used to assess the physical and mental health; ICU nurses were asked to complete Self-administered questionnaire on demographic characteristics and health behaviors. Multiple linear regression was employed to analysis the data.

[Results] The scores of physical and mental health were (46.15±6.49) and (40.67±9.67) in 311 ICU nurses. It was found that only one factor sleep quality was positively associated with the physical health, but it was found that knowledge of health influencing factors, rest after work, sleep quality, exercise frequency, whether using psychology to do self-adaptation were positively associated with the mental health, when using the multiple linear regression (P<0.05).

[Conclusion] ICU nurses’ health behaviors have greater impact on their physical health and mental health, especially mental health. It is suggested that hospital managers should provide their psychological counseling, while ICU nurses should use psychology to do self-adaptation to improve mental health.

Key words : ICU nurses; health behaviors; physical and mental health
Study On Turnover Intention And Influencing Factors Of Icu Nurses In Yunan Province

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Objective: To assess the turnover intention among Intensive Care Unit (ICU) nurses in Yunnan Province, and to explore the potential influencing factors.

Methods: A total of 311 nurses from 10 tertiary hospitals were selected as study subjects, the scale of turnover intention was used to assess the turnover intention among the ICU nurses. ICU nurses were asked to complete a self-administered questionnaire on demographic characteristics, reasons on departure and Short-form General Physical and Mental health Scale (SF-8). T-test, one-way ANOVA, linear regression and multiple linear regression were employed to analyze the data.

Results: The scores of turnover intention were (14.86±3.29) in 311 ICU nurses, and the low, middle, high levels of turnover intention accounted for 17.0%, 72.0%, 11.0%. The results of t-test and one-way ANOVA analysis showed that there were statistically significant of hospital level (t=2.215, P=0.027), shift condition (F=4.969, P=0.008), work overtime frequency (t=3.138, P=0.002) with the scores of turnover intention. The results of Linear regression analysis showed that physical and mental health were negatively correlated with turnover intention among ICU nurses, the worse health condition, the higher tendency of turnover intention. The results of multiple linear regression analysis showed that there were statistically significant in the mental health, work overtime frequency, hospital level; it showed that the worse mental health condition, the more work overtime frequently the lower hospital level, turnover intention will tend to be more obvious.

Conclusion: Turnover intention among ICU nurses were obvious, mainly moderate level. Mental health, work overtime frequency and hospital level are the main influencing factors of turnover intention.

Key words: ICU nurses; turnover intention; influencing factor;

The Research About The Dietary Fatty Acid Intake And Its Components Of The Wa Nationality In Yunnan And The Relevance Associated With Chronic Diseases

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Background: This research is supported by National Natural Science Foundation of China (81360427). To study the nutritional status, the current situation and changing trends of major chronic non communicable diseases (NCD) of Wa nationality. Discuss the relationship between major NCD and the dietary fatty acids, nutrition factors and non-nutritional factors.

Method: Multi-stage stratified cluster random sampling method was used and 18 years old and older residents were recruited the total number was 487. The survey include: inquiring survey, dietary survey, physical examination and laboratory testing. The food samples were collected by using duplicate portion method then the gas chromatograph to test the 10 kinds of fatty acid and total fatty acid in the mixed diet closely associated with chronic diseases.

Result: There were 129 hypertensive people (26.3%); 31 high TC people (6.4%); 192 high TG people (39.4%); 83 mixed hyperlipidemia people (17.0%); 32 low HDL people (6.6%); 91 high LDL people (18.7%); 39 diabetes (8.0%); 59 light weight population (12.1%); 99 overweight people (20.3%); 35 obesity people (7.2%). The chemical analysis and the logistics regression analysis shows the arachidonic acid (C20:4) is a protection factor of dyslipidemia. The sinapic acid and vegetable oils are the protection factors in hypertension. Palmitic acid (C16:0, OR = 1.05) intake is a risk factor for hypertension. The linoleic acid (C18:2) and manganese are the protection factors of obesity.

Conclusion: The dyslipidemia prevalence rate of Wa nationality is higher than national average levels in 2010, in which, the hypercholesterolemia (high TC morbidity rates) is 1.94 times of residents prevalence of the national resident who are 18 years old and older in 2010, and the prevalence of overweight, obesity and diabetes are all lower than the national prevalence of 18 and older residents in 2010. The dietary structure is unreasonable that there are 2 challenges which over nutrition and undernutrition.

Keywords: Wa nationality; nutrition surveys; dietary fatty acids; Chronic Non-Communicable Diseases; Relationship
How Is The Health Literacy Among Cambodian Migrants In Trat Province, Thailand?

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Background: Health literacy is an important skill for a person to understand and manage their health care effectively. Prior studies show that health literacy acts as a strong predictor of health status for all populations, especially migrant workers. This pilot study aims to understand the health literacy and the factors related the health literacy in the Cambodian migrants’ views by using the Osborne’s concept as our conceptual framework.

Methods: A cross-sectional survey design was employed, and fifty Cambodian migrants who worked in Trat province on the eastern border with Cambodia were randomly selected and recruited from three main sectors, that are agricultural, industry and service economic sectors, using time-location sampling technique. The Cambodian language questionnaire was used to collect demographic, socioeconomic characteristics and health literacy as a self-report. This study has accreditation by Burapha university ethics committee (No.59/2559) for ethical approval.

Results: The results indicated that 53% of our participants were male workers. Half of the migrants were in age group of 21-30 year, Almost all (97%) crossed the border without passports but then registered with Thai government. One person was not Buddhist and (30%) did not have families. Most of them (83.3%) have access to the Compulsory Migrant Health Insurance because they can communicate with Thai language (72.0%). The important results show that 86.0% of migrants had the health literacy at the moderate level including both the knowledge about health information (88.0%) and the access to the health information (76.0%). They had some difficulty understanding the health information at the high level (16.0%), however, they were healthy while living and working in Thailand (92.0%).

Conclusion: Health literacy means the ability of worker to access, understand and use health information. Most of migrant workers can access the health information with the support by Thai health care officer but they had some difficulty to communicate about their signs and symptoms with the doctors and to understand about their health advice. Recommendations are to improve the health communication by developing both the media with the plain language and the volunteer migrant workers to communicate in their group.

The Study On The Content Of Heavy Metal In Yunnan Edible Roses

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Background: Yunnan province, known as “Asian flower city”. It is a largest production base for fresh cut flowers in Asia. In particular, there has more than 700 species of edible flowers in Yunnan province, China. At present, mining, smelting and processing activities of heavy metals is becoming more and more frequent with the industrialization process accelerated, which resulting in a lot of heavy metal into the soil, water and air caused serious environmental pollution. These heavy metals can interact with the body’s proteins and enzymes, and make them loss of activity. They can also enrich in some organs of body such as the liver, kidneys and brain, causing organ damage and even some diseases, for instance cancer, cardiovascular, children with mental retardation.

Methods: Firstly, 100 edible rose samples were randomly collected in six villages of Anning city, where is a main cultivation base for edible roses in Yunnan province. At the same time, the optimal experimental conditions of microwave digestion—hydride generation were optimized and the method microwave digestion atomic fluorescence spectrometry was evaluated. Then the content of lead, arsenic, and mercury was determined by microwave digestion atomic fluorescence spectrometry.

Results: The average content of lead and arsenic was a little exceeded compared with the industry standard of China ministry of agriculture for green food-edible flowers (NY/T 1506-2007), and not detected mercury. Among all of the villages, there are six villages where the lead content, and two villages where the arsenic content was above the permit level.

Conclusions: The research provides data support to grasp the concentration of heavy metal in edible roses in Yunnan province. A series of measures should be taken to control the problem of heavy metal pollution in edible flowers. Then we will continuously monitor the level of heavy metals in edible roses in the same areas in future to promote human health.

Keywords: Edible rose, Heavy metal, China
Background: The HIV/AIDS patients who drop-out from antiretroviral therapy is becoming more serious. The objective of this study is to understand the social support status of the respondents.

Aims: The objective of this study is to understand the social support status of HIV/AIDS patients who drop-out from antiretroviral therapy in Honghe prefecture.

Methods: 136 HIV/AIDS patients who drop-out from antiretroviral therapy in Honghe prefecture were investigated. The questionnaire survey was conducted with the Social Support Scale (SSS) and the basic information table, and the results were statistically analyzed by SPSS 17.0.

Results: The total scores, subjective support scores and objective support scores of HIV/AIDS patients who drop-out from antiretroviral therapy were (26.3±7.50), (15.4±5.33) and (5.11±2.21) respectively. All the scores were lower than the Chinese norms, and the difference was significant (P<0.001). The subjective support from the parents is 48.1% which is the highest proportion among relatives. In the objective support, the financial support and help for solving practical problems were mainly from the family members except the spouses, separately ratio is 60.7% and 68.1%, but there were 16.3% respondents without any financial support and helps for solving practical problems.

Conclusions: All the social support scores were lower than the Chinese norms, we should improve the social support system toward HIV/AIDS patients who drop-out from antiretroviral therapy.

Keyword: HIV infection, Social support, Social Support Scale, SSS
Determinants Of Intention On Repeat Blood Donation: A Systematic Review

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Objective
To perform a systematic review of factors that associated with intention to repeated blood donation among blood donors.

Methods
The literature search was carried out on PubMed databases using the keywords “blood AND intent* AND (repeat* OR return OR repeti*)”. No date or language restrictions were applied to the search. This literature review was completed in May, 2016. The selection process and the reporting of the review followed the Preferred Reporting Items for Systematic reviews and Meta – Analyses [1]. The Translation of Evidence Levels was used to evaluate the quality of each single primary study [2].

Results
Out of 498 records resulted in the search, 20 papers were included in the final analysis within proposed criteria. Two of the selected studies were systematic reviews, five of them were randomized controlled clinical trials and intervention studies; three of them were cohort studies and 10 studies were cross-sectional; case-control studies and qualitative research. Attitudes to behavior and self-efficacy were the most reported associated factors to blood donation intention, followed by subjective norm, perceived behavioral control; satisfaction, personal moral norm, blood donation reactions inventory, donor demographics, blood donation reactions inventory and environmental factors.

Conclusions
The systematic review suggested that advocating for positive attitudes to blood donation and self-efficacy, underlining “give blood is personal responsibility in social” could increase repeat blood donation.

Keywords: intention, blood donation, determinants, repeat.

List Reference:

Multifactor Logistic Regression Analysis Of Occupational Hearing Loss Among The Chinese Southwest Train Drivers

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Background: Occupational hearing loss will seriously affect the health of the occupational population, and will affect the occupational safety. This study was to investigate the hearing problem of Chinese train drivers and their influencing factors.

Methods: A questionnaire survey was conducted among 2045 train drivers in southwest of China. The hearing problems were measured by the Chinese version of Hasson's Hearing-noise scale (Sweden, 2009).

Results: (1) Hearing problems: the detected rate of tinnitus-sustained, tinnitus severity, tinnitus (including above), hearing loss, and hearing problem (including tinnitus and hearing loss) was 57.9%, 49.7%, 63.4%, 5.3%, and 63.6%. (2) The multifactor Logistic regression analysis model showed that the numbers of post/duty changed, type of train, and driving district these three factors are the main influencing factors of the hearing problem, ie. the less changed post/duty in the past five years, the diesel train drivers (VS electric train drivers ), and kaizhou driving district (VS kunming, guangtong driving district) are more likely to have hearing problems. (3) Scale with high reliability (hearing problem dimension Cronbach's coefficient =0.803) and high validity.

Conclusions: We have firstly measured the hearing problems of train drivers in China by the Chinese version of Hasson's Hearing noise scale. It should be paid more attention to reduce the hearing problems by controlling the risk factors.

Key words: train driver ; occupational hearing loss; scale; influencing factor

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Predicting Factors Of Happiness Among Older Adults In Vientiane, Lao PDR

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The objectives of this study were to examine happiness among older adults and to explore predictive factors of happiness among older adults in Vientiane, Lao PDR. The sample was 250 older adults aged from 60 years and over, who were good communicators and volunteered to participate in this study. Data were collected by the researchers’ team in their home and at the community. The instruments consisted of demographic, perceived health status, stress, self-esteem and positive thinking. Data were analyzed by using descriptive statistic and multiple regressions. The results showed that 59% of older adults had a high level of happiness. Factors such as self-esteem, positive thinking, incomes, and perceived health status were positively associated with happiness ($r = .698, .661, .302, .138$ respectively, $p < .05$) while stress was negatively associated with happiness ($r = -.655, p < .05$). Finally, Self-esteem, stress, positive thinking and incomes were significant factors that combined to account for 78.2% ($R^2 = .782, p < .05$) of variation of happiness among older adults. Self-esteem was found to be the most influential factor in predicting happiness among the older adults follow by stress positive thinking and incomes ($r = .334, -.295, .229$ and $.14$ respectively, $p < .05$). Therefore, health care providers should consider using all these factors to develop health promoting program of happiness for older adults in order to encourage happiness and well-being.

Keywords: Happiness, Older adult

Women Pyrethroid Exposure During Three Trimester Of Pregnancy In Rural Xuanwei, China

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Background: Pregnancy exposure to Pyrethroid pesticides attracted global concerns because of their particular vulnerability and the increasing application of Pyrethroid pesticide. The purpose of the study was to understand pregnant women exposure to pyrethroids in each trimester.

Methods: The data were collected in the birth cohort study at 20 villages of Xuanwei county since 2014. Repeat measurement from the first trimester to the third trimester by questionnaire to learn the pyrethroids exposure. The data was analyzed by statistical description firstly and the predictors of exposure were analyzed by logistic regression.

Results: A total of 218 pregnant women were recruited, whose age was 24.38±5.184 years old. The majority of them (81.2%) was Han nationality, and more than half women (51.8%) received junior high school education. The percentages of occupation distribution were 79.5% for farmers, 9.2% for migrant workers, 7.3% for unemployment, and 4% for the others, respectively. Women Pyrethroid exposures at least in any period of trimester made up 46.2%, and especially, 41 women (19.3%) reported had been exposed the pesticide in each of trimester. The exposure rates from first trimester to third trimester were 36.7%, 31.3% and 29.9%, respectively. The exposure included direct contact by herself and indirect contact by her husband and around person. In the first trimester, the exposed ways were 86.3% for direct contact. In the second trimester the exposed ways were 82.1% for direct contact. In the third trimester the exposed ways were 82.8% for direct contact. Based on Multinomial logistic regression, the relative risk ratio switching from age group (more than 30 years old, 23~30 years old, less than 23 years old) was 3.327 ($p=0.044$) for being in exposure for three trimester vs. free exposure. And the relative risk ratio for a one-unit increase in the nationality (Han and ethnic minority) was 2.736 ($p=0.032$) and the occupation (farmer and non-famer) was 6.213 ($p=0.021$).

Conclusions: Pyrethroid exposure to pregnant women is common in rural areas of XuanWei. The elders, Han nationality and farmer may increase the Pyrethroid exposure risk of pregnant women. Therefore, it is necessary to strengthen health education in rural areas, and enhance the health consciousness of pregnant women.

Keywords: Pyrethroid exposure, Pregnant women, Repeat measurement
Effect Of Health Promotion Program With Application Of Medicine On Buddhism To Selfcare For Decreasing Serum Lipid Level Among Dyslipidemia Patients

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Background: Dyslipidemia is the highest mortality rate in the world that leads to cardiovascular. This study aimed to effect of health promotion program that applied Protection Motivation Theory (PMT) and Medicine on Buddhism (MB) to decrease lipid serum in dyslipidemia patients.

Methods: This Quasi-Experimental research included 62 samples; 31 samples in experimental group and 31 samples in control group. Intervention of health promotion program included learning through lecture and VCD, modelling, telling the experience, demonstration brisk walk and meditation, practicing on guidebook, recording on diary, exercise and meditation behavior, while the control group was not received the program. The duration of this study was 10 weeks. Data were collected by questionnaires. Pair sample t-test and sample t-test were tested within groups and between group.

Results: After the intervention, experimental group had statistically significant mean scores of knowledge about the dyslipidemia disease, perceive susceptibility, perceived severity and self-efficacy, response efficacy, intention in practice and practice behavior of patients with dyslipidemia in terms of eating, exercise and stress, higher than before the experiment and higher than the control group (p-value < 0.05). Mean of cholesterol, triglyceride had statistically significant decreased than before the experiment, and lower than the control group (p-value < 0.05). However, the mean of LDL-cholesterol had no statistically significant increased more than before the experiment and the control group (p-value > 0.05).

Conclusions: The health promotion program could be extended to improve patients behavior for dyslipidemia controls.

Keywords: dyslipidemia, protection motivation theory, Medicine on Buddhism, brisk walk, meditation.

Effectiveness Of The Application Of Safety Culture Creation Program In A Construction Site In Bangkok Province

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The objectives of this research was to the effectiveness of the application of safety culture creation program in a construction site in Bangkok province. The study was purposive sampling the samples total were 107 workers. The two research instruments were the questionnaire consists of three parts: the first part was personal information, the second part was a safety culture of perception about the operation of the organization had the answer had two options are not aware that they are implemented and that are being implemented, the third part was the safety culture of internal psychological. The safety culture of safety behavior was observed by the behavioral observation. The safety culture creation program in a construction site was divided into two levels of evaluation including the organizational level and the worker level by the application of GL Noble Denton’s safety culture PROFILER Model. The evaluation of safety culture on three parts where the perception about the operation of the organization, safety behavior and internal Psychological by the application of the cooper concept. The data were analyzed using percentage, mean, standard deviation and test the significance difference with paired t-test.

The result of research reveals that the level of safety culture before the implement of the program found that of the perception about the operation of the organization percentage was (52.3%), the safety behavior was the moderate level, mostly (59.8%), and the internal of the psychological was the moderate level, mostly (73.8%). After implementing program, the result was found the perception about the operation of the organization percentage was (84.1%), the safety behavior was overall at the highest level, and the internal of the psychological was over all at the high level. Comparing before and after the average scores of safety culture was found the score of after implementing higher than the before implement at the level of 0.05, significantly.

The implement of program can be the basis for developing and strengthening a safety culture and the model useful to create a culture of safety for other industries and to achieve a sustainable to a safety culture.
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Kunming Medical University

Objective: This study focuses on family health financing of Zhaotong City in Yunnan Province for the progressive analysis to find out the current situation of health financing in fairness and its influencing factors and to provide the basis for improvement of health financing equity.

Methods: Stratified random cluster sampling method was used to select the sample from three countries in Zhaotong City. Total sample size was 3430 families.

Results: The government expenditure on health, social insurance, commercial insurance and direct cash payments were presented regressive situation. The equity of direct cash payment was better than other three financing ways.

Conclusion: Change the way of new farmers financing and reduce the proportion of direct cash expenditure on health in health financing and strengthen the use of tax for health financing.

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Objective: To investigate family economic conditions, health expenditure and health service utilization among rural families in Dali Bai Autonomous Prefecture of Yunnan Province, in order to analyze and evaluate the fairness of health financing by using the WHO and the European Union health financing Fairness Evaluation Indices.

Materials and Methods: Stratified random cluster sampling was used to select sample according to the economic development condition of counties in Dali. Three counties were selected as study sites and around 600 families in each county were interviewed about their family income and expenditure, health service utilization for every family member. The total number of rural families in the survey is 3702. Data was entered Epidata database and analyzed using SPSS and Excel software. Several Indices were used to analyze the equity of health finance including family health financing contribution rate (HFC), the index of Fairness for Financial Contribution (FFC), Kakwani index, Lorenz Curve, and ratio of families which had catastrophic health payments.

Results: In study families, 17.21% of family expenditure went to health service, which only less than expenditure of construction and much more than food expenditure which accounted 2.76% of all family expenditure. In the ten groups of families from lower 10 percent to higher 10 percent family ATP, Index of fairness of Financial Contribution (FFC) was in the range of 0.23-0.78 and decreased with ATP increased. The total FFC was in low level of 0.51 with 0.61 in Midu County, 0.53 in Dali City and 0.49 in Weishan County. The ratio of families which had catastrophic health expenditure was in the high level of 37.41%, with 45.34% in Weishan County, 40.43% in Midu County and 26.29% in Dali City. Logistic regression showed that six factors increased the ratio of families which had catastrophic health expenditure including the number of family members, total family income, total family health expenditure, and whether or not there was over 60 years old person, chronic disease patient and hospitalized patient in the family. Kakwani index and Lorenz curve indicated that health financing in study sites was negative progressivity.

Conclusion: The equity of health financing was in low level in Dali and needed to be paid more attention to it. Government should increase health finance with economic development and support poor families with health problem in order to improve equity of health and health services utilization.

Keyword Health Financing; Equity; Index of Fairness of Financial Contribution; Catastrophic Health Expenditure; Kakwani index; Lorenz curve
The Influencing Factors Analysis Of Chronic Diseases Among Rural Residents With Different Gender In Zhaotong

Liping He1, Xiaomei Li2, Ying Chen1, Zhen Yu2, Qiong Meng2, Xiaoqing Zhang2
1Kunming Medical University
2School of Public Health, Kunming Medical University

Background: Analyze the influencing factors of chronic diseases in rural residents with different gender in Zhaotong, provide evidence to make health policy of prevention and treatment of chronic disease for rural residents with different gender.

Methods: Multistage stratified random sampling method was used to sample. Household surveys were conducted by face-to-face interviews with questionnaire in July and November in 2013. 13680 subjects in 3697 households among three counties were surveyed. The prevalence rates of chronic diseases were standardized by age. Chi2 test and logistic regression are used to analysis the influencing factors.

Results: The prevalence rate of chronic diseases was 12.7%. The rate of female (15.2%) was higher than that of male (10.4%). For both of male and female: The older, the higher the prevalence rate of chronic diseases; The lowest income group had the highest rate than other income groups; The farmers and no occupation group had higher rates than the other occupational group; The bigger the number of family members, the smaller the rate. For female: The minority had higher rate than Han nationality; The higher education level, the lower rate; The divorced and widowed group had the highest rate, the unmarried group had the lowest rate. For male: The high school or above education level group had the lower rate than illiteracy group, primary school group and junior middle school group; The unmarried group had the lower rate than the married group and the divorced and widowed group. The older groups, different income groups, different nationality groups, illiterate group, different marital status groups of female had higher prevalence rates than the male.

Conclusion: Age, income, occupation, marital status and number of family members were the common influencing factors of chronic diseases for both male and female in Zhaotong; Nationality and education level were the female’s influence factors of chronic diseases also.

Keywords: gender; chronic diseases; influencing factors
The Morbidity Pattern Of Inpatients In Mountainous Area Hospital, Central Of Vietnam

Thien Kim Hoang, Thi Bich Thuy Le, Vo Thi Nhu Mai Ho, Thi Khanh Linh Nguyen, Van Vui Tran, Nhat Quang Pham, Van Hoa Nguyen
1 Hue University of Medicine and Pharmacy

Objectives: Identify the Morbidity Pattern of inpatients at Dakrong General Hospital in the mountainous area of Quang Tri, Central of Vietnam.

Methods: A cross-sectional study was conducted. Data were collected from all health records of inpatients at Dakrong General Hospital from January, 2011 to December, 2015. Inpatient records were diagnosed based on ICD-10.

Results: Morbidity pattern categorized by ICD-10: Pregnancy, Childbirth and the Puerperium (40.6%); Diseases of the Respiratory System (25.8%); Injury, Poisoning and Certain Other Consequences of External Causes (16.3%); Diseases of the Circulatory System (10.3%); Certain Infectious and Parasitic Diseases (8.4%). The three leading causes of admission were: Spontaneous Delivery (18.2%), Respiratory Inflammation (13.0%), Pneumonitis (12.2%). All of the disease groups: Communicable diseases, Non-communicable diseases and Accidents, Poisoning and Injuries had a tendency to increase through 5 years; and non-communicable diseases had the highest prevalence of 3 groups. The overall mortality rate was low (0.08%) with a downward trend. Percentage of female inpatients was higher than male (54.9% vs 45.1%).

Conclusion: The morbidity pattern of inpatients at Dakrong hospital in 5 years from 2011 to 2015 pointed out that Non-communicable diseases and Accidents, Poisoning and Injuries had a tendency to increase; Communicable diseases remained stable. This result was suitable with morbidity pattern in developing countries.

Keywords: morbidity patterns, general hospital, mountainous area, ethnic minorities, ICD10.

Analysis On Social Support Status And Associated Factors Among Breast Cancer Inpatients With Chemotherapy In Yunnan

LIAN Dan1,TIAN Ichun1,GAO Wanhong2,MEI Xuejun3
1 Kunming Medical University, PR China
2 Yunnan University
3 Kunming City Center for Disease control and Prevention

Background: Breast cancer patients not only face with the fear of death, the intense frustration of self-esteem and the diminished sense of self-worth because of the special disease position. These patients avoid social interaction for fear of the negative emotions such as inferiority, depression and anxiety which produced by discrimination, lead to affect the quality of their life.

Aims: To understand the social support levels among breast cancer patients in Yunnan, as well as to explore the factors associated with social support.

Methods: According to the unified inclusion and exclusion criteria, 121 breast cancer in-patients with chemotherapy were interviewed with structured questionnaire. Social demographic characteristics, Xiao’s Social Support Rating Scale, General Self-Efficacy Scale, clinical and experimental data were collected.

Results: The level of social support in total, objective social support, subjective social support and utilization degree for breast cancer patients were 49.43±5.69, 13.35±2.51, 27.59±3.78, 50±1.98 respectively. Compared with domestic norm points difference was statistically significant. Prompt investigation of social support, objective support and subjective support score significantly higher than the norm, and the efficacy of the support score significantly lower than the norm. Marriage status and self-efficacy were associated with social support level significantly.

Conclusions: The breast cancer in-patients in Yunnan had a higher social support level overall. Having-marriage status and higher self-efficacy had a positive influence on breast cancer in patients’ social support level.

Key Words: Breast cancer; Social support; self-efficacy
Background: The legacy of explosive remnants of war (ERW) endures long after conflicts cease, threatening the health of civilian populations inhabiting contaminated regions like the Lao People's Democratic Republic (Lao PDR). Establishing the burden of injury related to ERW requires accurate health information and injury surveillance regarding casualties and survivors of ERW. The purpose of this study was to explore the barriers and enablers to the collection and use of health information and injury surveillance related to ERW in the Lao PDR.

Methods: Qualitative semi-structured interviews with key informants working in response to ERW contamination and victim assistance with the Lao PDR (N=17) were undertaken. Participants were identified using purposive sampling, and snowball sampling from the original informants. Data was analysed using thematic analysis.

Results: The findings suggest a number of financial, logistical, informational and human resource constraints to effective injury surveillance. Participants suggested that creating an enabling environment for more accurate injury data requires increased capacity building; the use of village resources and local translators; a systematic approach; improved governance structures and knowledge sharing opportunities.

Conclusions: Quantifying the burden of injury related to ERW is challenging. It is recommended that health information and injury surveillance systems are strengthened to improve the accuracy of casualty and survivor health information and facilitate precise measurement of ERW-injury burden. This can be assisted by standardized data collection and analyses practices based on established guidelines, with clearly defined indicators and minimum datasets developed.

Keywords: Health Information System, Enablers and Barriers, Mine Action, explosive remnants

Background: School health care workers is the main force to carry out school health work, the number and quality of personnel allocation is directly related to the quality of school health. To investigate current situation of school health care workers in Kunming and needs of professional training.

Methods: An survey among 48 primary and middle schools in Kunming was conducted in 2015, and an anonymous questionnaire survey of self-perceived working skills was conducted among 346 school health workers in 4 districts (Wuhua, Panlong, Xishan, Guandu), and 8 administrative counties of Kunming.

Results: Among the schools, the arrange rate of students and school health care workers reaching 600?1 only accounted for 50%. the medians of per capita service students were more than 600. 321 school health care workers were female (92.8%). The average age was 37.40±9.67 years, and the average job time was 6.5 years. The school health care workers had various professional titles (medicine, nursing, pharmacology, education, sports, literature, etc.). 238 (68.8%) school health care workers attained college degree, and only 138 (45.7%) of them had medical professional qualification certificates. About 50% or less of all questionnaire surveyed health care workers perceived enough skills in various school public health works, student health consultation and health education.

Conclusion: The need of enough qualified and professionally trained school health workers should be strengthened, health care workers should better possess medical /school health related professional knowledge and need to be trained specifically.

Keywords: School health services, school health care worker, Health services needs and demand

This study was supported by A research grant from Yunnan Education Department (2013Y166)
Situation Of Implementing Circular 08 On Human Resource In Public Service Delivery Units Of Health Sector

Hoang Minh Nguyen, Mai Hoa Do, Viet Hung Tran, Xuan Chien Nguyen, Phuong Thuy Nguyen, Bao Chau Le, Thi Binh An Nguyen, Thi Thi Ha Bui
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2Hanoi School of Public Health

Background: Circular 08/2007-TTLT-BYT-BNV issued in 2007 by the Government provided guideline for distribution of personnel in public service delivery units of health sector. With current context of disease pattern change, globalization and reform of health system, Circular 08 became out-of-date. This research was conducted to provide evidence to identify gaps between distributions of human re-source in reality and the Circular, determine issues during implementation of this policy.

Methods: A mixed-method design with quantitative and qualitative techniques were applied. Quantitative data were collected in all provinces via Provincial Health Bureaus to get evidence related to gaps of personnel distributions. Qualitative data were conducted with stakeholders to identify implementation issues.

Results: The initiation on the number of health staff per bed is not appropriate with clinical sector at all levels. At central and provincial levels, the actual number of beds is much more than the planned number of beds, it led to work-overload of health staff. At lower level, number of doctors is lower than the initiation because of difficulty in personnel attraction and recruitment due to lacking appropriate incentive and task-shifting policies. In preventive sector, particular centers which are in the progress of transition period on structure and function faced the challenges of implementing required tasks and ensuring the effectiveness of service delivery of human resource. Besides, inconsistent system of district health centers, large area and regular supervision requirement are the factors which made the difficulties for health staff distribution of district health centers. At commune level, although communal health stations were provided modern health equipment, there are insufficient health staff to run these machines to deliver the services as expectation of community.

Conclusion: The initiation of health staff number and structure in Circular is not appropriate with the reality anymore. The Government should revise Circular 08 with the adjustment for specific indicators of HRH distribution. For clinical sector, it should conduct autonomy mechanism, especially for higher level hospitals. For preventive sector, it needs more appropriate management, flexible mechanism for staff attraction and recruitment.

Keywords: Circular 08, human resource, distribution, health service delivery.
Poster Exhibition 2

Time: 13:30 – 14:00
Room: Exhibition Hall (in front of Ball Room)

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE57</td>
<td>Common Health Problems And Health Care Seeking Behaviors Of Elderly In Kalaw Township</td>
<td>Dr. Aye Lwin</td>
</tr>
<tr>
<td>PE58</td>
<td>Quality Of Life And Its Association Among Older People In Rural Vietnam</td>
<td>Ms. Ngoc Bich Le</td>
</tr>
<tr>
<td>PE64</td>
<td>Spatial Aggregation Analysis Of Adverse Pregnancy Outcomes Among The Rural Women Of Childbearing Age In Yunnan Province Of China</td>
<td>Mr. Lixinlong Wu</td>
</tr>
<tr>
<td>PE207</td>
<td>Health Behavior Patterns And Prevention Of Urolithiasis In Patients In Bungkhla District, Buengkan Province, Thailand</td>
<td>Dr. Warangkana Sungatthisawad</td>
</tr>
<tr>
<td>PE255</td>
<td>Utilization And Perception Of Adult Populations On Tobacco In Urban Area Of Hpa-An Township, Kayin State</td>
<td>Dr. Ya-Min Thaung</td>
</tr>
<tr>
<td>PE278</td>
<td>Study On Malnutrition, Overweight And Obesity Among Preschools Children In Quang Nai City, Vietnam</td>
<td>Dr. Loc Viet Ngo</td>
</tr>
<tr>
<td>PE28</td>
<td>Vascular Age Based On The Framingham Risk Score In Patients With Coronary Artery Disease And Some Related Factors</td>
<td>Mr. Hung Manh Bui</td>
</tr>
<tr>
<td>PE34</td>
<td>Awareness And Practice On Prevention Of Hypertension Among Housewives In Rural Areas Of Myit-Than Township</td>
<td>Dr. Thandar Khin</td>
</tr>
<tr>
<td>PE54</td>
<td>Analysis Of Prevalence, Awareness, Treatment, Control, And Self-Management Of Hypertension Among Dai Ethnic Minority In Yunnan Province</td>
<td>Ms. Yong Li Zhou</td>
</tr>
<tr>
<td>PE61</td>
<td>A Comparative Study Of Prevalence, Awareness, Treatment And Control Of Hypertension Among Four Unique Ethnic Minorities In Yunnan Province</td>
<td>Ms. Hong Qian Kong</td>
</tr>
<tr>
<td>PE89</td>
<td>The Anxiety Present Situation And Influence Factors Analysis Of Male Partner Who Involved In Induced Abortion In A Hospital In Kunming</td>
<td>Mr. Zhou Hai</td>
</tr>
<tr>
<td>PE102</td>
<td>Prevalence Of Selected Risk Factors Of Non Communicable Diseases Among People In A Central Region Of Vietnam</td>
<td>Ms. Bao Yen Luong Thanh</td>
</tr>
<tr>
<td>PE112</td>
<td>To Analysis The Psychological Assessment And Coping Style Of Female Abortion In Two Hospitals In Yunnan Province</td>
<td>Mr. Zhou Hai</td>
</tr>
<tr>
<td>PE125</td>
<td>Progress In The Study The Causes Of Autism Spectrum Disorders</td>
<td>Ms. Yang Xia Li</td>
</tr>
<tr>
<td>PE129</td>
<td>The Effects Of Exercise For NCD Prevention And Management On Blood Variables, Physical Fitness, And Waist And Hip Circumferences In Laos</td>
<td>Prof. Kyungock Yi</td>
</tr>
<tr>
<td>PE130</td>
<td>The Effects Of Integrated Health Care Program On The Knowledge Of Hypertension, Diabetes And Nutrition, Blood, Body Composition, And Physical Fitness For The Prevention And Management Of NCDs In Laos</td>
<td>Prof. Kyungock Yi</td>
</tr>
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<td>ID</td>
<td>Title</td>
<td>Authors</td>
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</tr>
<tr>
<td>PE154</td>
<td>Associated Factors Towards Medication Compliance Among Patients Who</td>
<td>Mrs. Fang Liu</td>
</tr>
<tr>
<td></td>
<td>Have Hypertension And Diabetes In Yunnan Province</td>
<td></td>
</tr>
<tr>
<td>PE162</td>
<td>Food Consumption Behavior And Exercise Of The Elderly With And With-</td>
<td>Dr. Suwalee - Lowirakorn</td>
</tr>
<tr>
<td></td>
<td>out Overweight In Khokkrad Subdistrict, Muang District, Nakhonratrasima</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Province</td>
<td></td>
</tr>
<tr>
<td>PE167</td>
<td>The State Of Stress, Anxiety And Depression In Nurses And Its Relation</td>
<td>Mrs. Thuy Thi Tran</td>
</tr>
<tr>
<td></td>
<td>To Workload And Work Relationship, A Story In One Vietnamese Hospital</td>
<td></td>
</tr>
<tr>
<td>PE190</td>
<td>Progress In Autism Spectrum Disorders Etiology</td>
<td>Ms. Xiali Yang</td>
</tr>
<tr>
<td>PE236</td>
<td>Factors Associated With Malnutrition Among Children Aged 6 - 12 Years</td>
<td>Dr. Chansathanit Pink</td>
</tr>
<tr>
<td></td>
<td>In Xayathane District, Xayaboury Province</td>
<td>Taikeophithoun</td>
</tr>
<tr>
<td>PE276</td>
<td>Prevalence Of Highglycemia In Pregnant Women Paksan District,</td>
<td>Ms. Thamarongsong Vassana</td>
</tr>
<tr>
<td></td>
<td>Bolikhamsay Province</td>
<td></td>
</tr>
<tr>
<td>PE290</td>
<td>Perception On Retal Quid Chewing, Yangon And Mandalay, Myanmar</td>
<td>Dr. Chomar Kaung Myint</td>
</tr>
<tr>
<td>PE279</td>
<td>Reactivating Of Physical Health And Ability Of The Participants To</td>
<td>Ms. Pornipha Kraitap</td>
</tr>
<tr>
<td></td>
<td>Prepare For Disasters With Fasting Integrated With The Eastern Philosophy Named</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daofeilong</td>
<td></td>
</tr>
<tr>
<td>PE284</td>
<td>Self Efficacy And Social Support Application With Nutrition Education On</td>
<td>Dr. Nitchatroj Panomai</td>
</tr>
<tr>
<td></td>
<td>Dental Carries Disease Prevention In Grade 6 Primary School Students,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Khonkaen Province</td>
<td></td>
</tr>
<tr>
<td>PE224</td>
<td>The Effects Of Dental Health Education Program On Behavioral Modification</td>
<td>Mr. Kritichat Kawecchat Pachanawon</td>
</tr>
<tr>
<td></td>
<td>For Periodontitis Among Type 2 Diabetes Patients In Khong-Chai District</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kalsinprovince</td>
<td></td>
</tr>
<tr>
<td>PE231</td>
<td>The Effects Of Health Behavioral Modification Program To Reductive Weig</td>
<td>Ms. Jananya Ngonkham</td>
</tr>
<tr>
<td></td>
<td>th Among Villages Health Volunteers In Pratumratchaovongsa District,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amnat Charoen Province</td>
<td></td>
</tr>
<tr>
<td>PE252</td>
<td>Effects Of Integrated Nod Health Care Intervention Program On Health</td>
<td>Prof. Gunjeong Lee</td>
</tr>
<tr>
<td></td>
<td>Informational Resource</td>
<td></td>
</tr>
<tr>
<td>PE289</td>
<td>The Effectiveness Of A Program Based On Health Belief Model And Social</td>
<td>Mrs. Ubonrat Wajarat</td>
</tr>
<tr>
<td></td>
<td>Support To Promote Breast Self-Examination In Women Aged 35-60 Years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In Kudkung Subdistrict Kumkeunkaew District, Yasothon Province</td>
<td></td>
</tr>
<tr>
<td>PE208</td>
<td>The Situation Of Physical Exercise Behaviors And Their Associated Factors</td>
<td>Mr. Kitipong Bumpen</td>
</tr>
<tr>
<td></td>
<td>Of Elderly People In Kokha Municipality Area, Kokha District, Lampong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Province</td>
<td></td>
</tr>
<tr>
<td>PE211</td>
<td>Quality Of Life And Related Factors Among People Living With Hiv In</td>
<td>MA. Nguyen Van Tien</td>
</tr>
<tr>
<td></td>
<td>Quang Tri Province, Vietnam</td>
<td></td>
</tr>
<tr>
<td>PE215</td>
<td>Traditional Popustum Beliefs And Practices On Food Restriction And</td>
<td>Ms. Kokasia Ko Nengmongyang</td>
</tr>
<tr>
<td></td>
<td>Hotbed Exposure Among Lao Women At Mother And Child Hospital,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vientiane, Lao P.D.R.</td>
<td></td>
</tr>
<tr>
<td>PE217</td>
<td>Lipolytic Bacteria Separation From Grease Traps For High Grease And Oil</td>
<td>Mr. Oun Tasing</td>
</tr>
<tr>
<td></td>
<td>Contaminated Wastewater Treatment</td>
<td></td>
</tr>
<tr>
<td>PE220</td>
<td>The Effect Of Health Promotion Program By Applying The Theory Of</td>
<td>Ms. Samunya Mukarsa</td>
</tr>
<tr>
<td></td>
<td>Empowerment In New Smeal Positive Pulmonary Tuberculosis Patients</td>
<td></td>
</tr>
<tr>
<td>PE228</td>
<td>Correspondence Between Policy And Implementation Of Health Promo-</td>
<td>Ms. Saiphirun Ngamsom</td>
</tr>
<tr>
<td></td>
<td>tion For Elderly People: A Case Study Of Lampang City Municipality,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lampang Province, Thailand</td>
<td></td>
</tr>
<tr>
<td>PE238</td>
<td>The International Cooperation On Public Health Between Universities</td>
<td>Dr. Peng Zhao</td>
</tr>
<tr>
<td></td>
<td>In The Greater Mekong Sub-Regional Countries And Kunming Medical University</td>
<td></td>
</tr>
<tr>
<td>PE244</td>
<td>Effect Of Behavioral Modification For Opisthorchiasis Prevention By</td>
<td>Ms. Jintana Srimoonmart</td>
</tr>
<tr>
<td></td>
<td>Participation Of Family Health Leader</td>
<td></td>
</tr>
<tr>
<td>PE248</td>
<td>Lifestyle For Health Promoting Of Depressed People In Thung Hua Chang</td>
<td>Mr. Sriprom Kasakool</td>
</tr>
<tr>
<td></td>
<td>District, Lamphun Province</td>
<td></td>
</tr>
<tr>
<td>PE253</td>
<td>Factor Associated With The Practice Of “Five Poe” In The Prevention Of</td>
<td>Dr. Vansy Vansy Vilayvone</td>
</tr>
<tr>
<td></td>
<td>Dengue Among Households In Boten District, Xaignabuly Province, Lao P.d.</td>
<td></td>
</tr>
<tr>
<td>PE269</td>
<td>Help-Seeking Behavior For Mental Health Problems And Associated Fac-</td>
<td>Ms. Duc Nu Hong Vo</td>
</tr>
<tr>
<td></td>
<td>tors Among Medical Students</td>
<td></td>
</tr>
<tr>
<td>PE272</td>
<td>The Effects Of An Application Of Health Benefit Model With Social Sup-</td>
<td>Ms. Paiwan Kana</td>
</tr>
<tr>
<td></td>
<td>port To The Breast Self Examinative Health Promotion Among Reproduct-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ive Women In Sichomphu District Khon Kaen Province</td>
<td></td>
</tr>
<tr>
<td>PE284</td>
<td>Health Benefit Model For Preventive Complication In Type 2 Diabetes Mel-</td>
<td>Mrs. Sawitri Promkul</td>
</tr>
<tr>
<td></td>
<td>litus Patients, Kudpladuk Suddistrict, Chuenchom District, Mahasarakham</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Province</td>
<td></td>
</tr>
<tr>
<td>PE285</td>
<td>The Effectiveness Of A Health Education Program Based On The Health</td>
<td>Mrs. Sawitri Promkul</td>
</tr>
<tr>
<td></td>
<td>Belief Model And Social Support For Preventive Complication In Type 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diabetes Mellitus Patients: A Case Study At Bandonsawaw Health promot-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ing Hospital, Kudpladuk Suddistrict, Chuenchom District, Mahasarakham</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Province</td>
<td></td>
</tr>
<tr>
<td>PE290</td>
<td>Awareness And Attitudes Towards Homosexuality And Related-Factors Of</td>
<td>Dr. Nguyen Dao Thien An</td>
</tr>
<tr>
<td></td>
<td>Students In The Public Health Faculty, Hue University Of Medicine And Pharmacy</td>
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<tr>
<td></td>
<td>Pharmacology</td>
<td></td>
</tr>
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</table>
Background: Myanmar, one of the developing countries in Asia, is facing the emerging issue of growing number of elderly population. There are relatively limited numbers of studies regarding the health of the elderly in Myanmar and also about health seeking behaviors among elderly.

Aims: (i) To describe socio demographic characteristics of elderly in Kalaw Township, (ii) To identify common health problems of elderly in Kalaw Township, (iii) To find out health care seeking behaviors of elderly in Kalaw Township.

Methods: A cross-sectional descriptive study was carried out in both rural and urban area of Kalaw Township, southern Shan state, Myanmar. A 49-item semistructured questionnaire was administered to random sample of 213 elderly.

Results: There was gender difference in education level, marital status, occupational status and morbidity. Despite the reported good self-rated health status was 47.89%, 74% had diseases. Forty one per cent of elderly had hypertension. 18.78% with musculoskeletal disorders and 17.37% with cardiovascular diseases. Comorbidity was present in 25.35% of respondent and among them, elderly with hypertension identified heart disease as the highest comorbid condition. Only 2.82% needed help for daily activities. More than 91% of respondents sought medical care when they became ill. Fifty one percent consulted with medical doctors for their health problems, 25.35% with self-medication and 9.86% did with not seek care. Most of the participants 49.77% went to elderly health care clinic. More than 70% went clinic first when they became ill but, 12.68% went clinic only if self-medication was failed to response.

Conclusion: Measures to reduce NCDs and their consequences were essential to be carried out and reduced morbidity, mortality and increased life expectancy.

Keywords: Elderly, Co-morbidity, Self-medication, Myanmar
Quality Of Life And Its Association Among Older People In Rural Vietnam

Ngoc Bich Le¹, Nguyen Thang², Le Anh³, Vu Lan³
¹Hanoi School of Public Health
²Vietnam Public Health Association

Objectives: This study aims to assess QOL and identify associated factors among older people in rural Vietnam.

Methods: A cross sectional study was conducted among 406 older people (≥ 60) in Thai Binh, Ha Noi, using a standardized WHOQOL questionnaire for older Vietnamese population. Independent t-test, ANOVA, and multiple linear regression were used in data analysis.

Results: Mean age of respondents was 71.7 years (SD = 7.1) and 53.2% was male. QOL score was above moderate, the highest score was found in psychology and social relationship domains and the lowest found in spiritual domain. Multiple linear regression revealed that being female, older age, living alone, lower education and having chronic disease were negatively associated with QOL.

Conclusion: The finding of the study showed that there was inequality of QOL among older adults in the setting. Action should be made to improve QOL among older people, especially for women, older age (above 80), lower education, living alone, and having chronic disease.

Keywords: aging, quality of life, Vietnam

Spatial Aggregation Analysis Of Adverse Pregnancy Outcomes Among The Rural Women Of Childbearing Age In Yunnan Province Of China

Linxiong Wu¹, Jianbo Li², Hanfeng Ye³, Mei Zhou⁴, Xueling Li⁵, Danrong Xia⁶, Yanling Yuan⁶, Wei Chang⁴, Lusha Gao⁷, Jianlan Wang³, Genrui Li³
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Background: Adverse pregnancy outcomes seriously affect reproductive health and population quality. This study was to analyze the GIS spatial aggregation of the adverse pregnancy outcomes of women of childbearing age in JIANSHUI county (Yunnan, China).

Methods: A GIS (Geographic Information System) Spatial Clustering Analysis with Moran’s I index was conducted among 2680 women of childbearing age who volunteered to participate in the national free prepregnancy health program in JIANSHUI (including 14 towns).

Results: (1) The adverse pregnancy detection rate of JIANSHUI was 7.99%.
(2) There was no significant global spatial aggregations (P >0.05) about the total or the 9 kinds adverse pregnancy detection rate on the whole JIANSHUI, which means generally speaking, these kinds’ detection rates (most global Moran’s I <0) in JIANSHUI maintain a stable and balanced state, ie. the county had a good pregnancy healthcare status.
(3) There was a significant local spatial aggregation (P <0.05) about the total adverse pregnancy detection rate in different towns of JIANSHUI, especially the POTOU town shows “High-Low Cluster” (local Moran’s I <0), which means the total adverse pregnancy detection rate of POTOU town was significantly higher than neighboring towns. Also birth defects detection rate shows a “High-Low Cluster” in GUANTING town, and medical abortion detection rate shows a “High-Low Cluster” in XIZHUANG town.

Conclusions: We firstly applied the GIS spatial aggregation to analyze the adverse pregnancy outcomes of women of childbearing age in JIANSHUI county, China. This study suggests that it will be a better effect if we take key measures to reduce prevalence rate of the clustered districts.

[Key words]: Spatial aggregation; Adverse pregnancy; Rural Women of Childbearing Age;

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Health Behavior Patterns And Prevention Of Urolithiasis In Patients In Bungkhla District, Buengkan Province, Thailand

Warangkana Sungsirithawad, Panupong Kaewwiset

Background: Urolithiasis is calculus found in kidney, kidney tubule, urinary bladder and urinary tract, the most in Northeast Thailand, especially at Bungkhla hospital, Buengkan province with high incidence: former patients can face recurrent incidence; genetics and environment have an effect on urolithiasis as a matter of fact. This research is therefore aimed to study urolithiasis patients’ health behavior patterns and prevention in this area.

Methods: This descriptive research collected data through interviews with patients diagnosed as urolithiasis by doctors during 2012-2014, and then population sampling was carried out, with based on the population sample formula, 66 were calculated from the total 268. Systematic random sampling with inclusion criteria was also done to find literate volunteers, 18 years old and upwards, living in this district. Interview format was consisted of 3 parts; general data of interviewee, health behavior patterns and prevention of Urolithiasis. The questions used a rating scale with 3 levels of Likert technique. Reliability of interview form employed Cronbach’s Alpha coefficient with alpha of 0.05. Power of interview form was 0.74. Data analysis was percentage, mean, standard deviation and 95% confidence interval.

Results: Most patients live in warm places, sweating occasionally at 66.7% (95%CI: 53.98 to 77.79); working a long period continuously and regularly in every season at 57.6% (95%CI: 44.78 to 69.65); eating meat and protein regularly - pork at 92.4% (95%CI: 83.19 to 97.49); vegetables or fruit regularly - bamboo shoots at 87.9% (95%CI: 77.50 to 94.61); with content of oxalate, a harmful substance causing urolithiasis. Patients performed moderate health behavior patterns and prevention of this disease at 80.3% (mean = 1.87±0.22, 95%CI: 1.81 to 1.92), followed by low performance at 16.7% (95%CI: 8.62 to 27.86), and only a few with high performance at 3.0% (95%CI: 0.36 to 10.52).

Conclusions: The results show that the patients do not perform their behavior patterns well enough in prevention of urolithiasis. Doctors must give the knowledge in health care to reduce the recurrent risk of this disease.

Keywords: Urolithiasis patients, Health behavior, Prevention of urolithiasis

Utilization And Perception Of Adult Populations On Tobacco In Urban Area Of Hpa-An Township, Kayin State

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Background: Tobacco use is one of the leading causes of preventable morbidity and mortality. Tobacco products used in Myanmar include all smoking and smokeless forms. Control of tobacco epidemic requires clear understanding of magnitude of epidemic. Assessment of knowledge and awareness on tobacco is essential as a baseline data for tobacco control program.

Objective: To determine utilization and perception of adult populations on tobacco in urban area of Hpa-An Township, Kayin State.

Methods: A community based cross-sectional analytical study was conducted by using pre-tested semi-structured questionnaires and ten pictorial health warnings, from September to November 2014. A total of 278 respondents (18-65 years), 188 males and 90 females were involved.

Results: The mean age of the respondents was 36.3 ± 13.4 years. Although 55.8% had good knowledge, only 16.3% were knowledgeable about tobacco control law. The respondents had satisfactory knowledge only on non-smoking areas (70.3%). More than half of the respondents were positive attitude on tobacco use and tobacco control law, and good perception towards both text-based and pictorial warnings. Pictorial warnings relating to ‘mouth cancer’, ‘tongue cancer’ and ‘peripheral vascular disease’ were most often mentioned as the scariest, the most believable and the most effective. Overall prevalence of tobacco use was 66.2%. Among the users, 27.3% were ever smokers, 57.6% were ever smokeless tobacco users and 18.7% were dual users. Prevalence of current smokers was 24.1% whereas current betel chewer was 56.1%. Positive attitude and good perception level is found among non-users (p<0.001). There is significant association between knowledge level and attitude, knowledge level and perception towards both text-based and pictorial health warnings (p<0.001, p=0.010 and p=0.001 respectively).

Conclusion: The main reason for tobacco use may be due to social factors such as peer and family member’s pressure, parental tobacco use and easy availability of tobacco products. Establishing peer education and counseling, together with family members enhancing through community involvement need to be promoted. It is necessary to strengthen and support community-based cessation activities and tobacco free environment. Dissemination of law and health education can’t control tobacco use. Enforcement of legislation is essential.

Keywords: Smoking, smokeless tobacco, pictorial warnings.
Study On Malnutrition, Overweight And Obesity Among Preschools Children In Quang Ngai City, Vietnam

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Background: Malnutrition is one of the most important causes for improper physical and mental development of children. Childhood obesity is a worldwide public health problem. The aim of the current study was to determine the prevalence of malnutrition and obesity in preschools children from 36 to under 72 months old in Quang Ngai City, Vietnam.

Methods: The current study is a cross-sectional study conducted on 900 of children from 10 preschools who are from 36 to under 72 months old and 900 their mothers in Quang Ngai City and performed in 2013 - 2014, with the aid of Quang Ngai Department of Health and Spss software were used for data analysis.

Results: 48.8% of children were boys and 51.2% were girls. The prevalence of malnutrition based on wasting, stunting, overweight and obesity was estimated to be 1.0 %, 2.9 %, 16.7 % and 9.2% among children, respectively. The proportion of their stunting associated with their gender, preschools and the nutritional status of the mothers. Their overweight and obesity were associated with their age, diet and knowledge of the mothers. This difference was significant (p<0.05).

Conclusions: In this area, malnutrition, overweight and obesity were the most important priorities that health officials must pay more attention to. It is necessary to have the designing and implementing targeted strategies of prevention of malnutrition for different areas in Vietnam.

Key word: Malnutrition, overweight, obesity, preschools children, Vietnam.

Vascular Age Based On The Framingham Risk Score In Patients With Coronary Artery Disease And Some Related Factors

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Background: Coronary artery disease is a common type of heart disease and a leading cause of mortality in the United States, European countries and other developing countries.

Objectives: To calculate vascular age with the Framingham risk score; to evaluate the relationship and the correlation between vascular age and traditional risk factors and the degree of coronary artery lesions based on Gensini score.

Methods: A cross – sectional research was conducted in 390 patients diagnosed with coronary artery diseases, being treated at the Department of Cardiology – Hue Central Hospital and Hue College of Medicine and Pharmacy Hospital during the study; proven by the results of coronary angiography showing significant stenosis (over 70%) or at least the blockage at one position of coronary artery.

Results: The average vascular age was 72.17 ± 10.93 years. There was a positive relationship and correlation between vascular age and the degree of coronary artery lesions; the traditional risk factors have simultaneously influence on vascular age of patients.

Conclusion: The intelligible application of Framingham risk score aid in stratifying the individual risk of cardiovascular disease in the specified population at risk.

Keywords: Vascular age, coronary artery disease, Framingham risk score
Background: Non-communicable diseases are one of the major health challenges of the 21st century, particularly in low and middle income countries. Among NCDs, hypertension is responsible for about 45% of death due to heart disease, and 51% of death due to stroke.

Objective: To study knowledge, attitude and practice on prevention of hypertension among housewives in rural areas of Myit-Thar Township.

Method: A cross sectional analytic study was done using semi-structured questionnaire among 238 housewives above 18 to 70 years of age.

Result: The mean age was 43.95 years, nearly 49% of the housewives were primary school level. About 40% of housewives had family history of hypertension. The awareness of hypertension was 57.1% among housewives. Almost 86% of housewives always added salt and salty sauce and 92.9% always used seasoning powder during eating. About 39% of housewives reported that they had history of hypertension and this showed the possibility of high prevalence of hypertension in rural areas. There was statistically significant association between the hypertension related knowledge with education level (p= 0.036) and habit of adding seasoning powder (p= 0.047). There was statistically significant association between younger age with the habit of eating processed food high in salt (p= 0.002) and older age with smoking (p= 0.004). There was also statistically significant association between presence of reported history of hypertension with habit of adding salt and salty sauce during eating (p= 0.003) and use of OC pills (p= 0.032).

Conclusion: This study warned to extend health education program to include risk factors of hypertension, complications of hypertension. CVD clinic should open so that the prevalence of hypertension and premature death due to complications of hypertension in rural area will be reduced. By using the easy understandable materials for giving health education to housewives as majority were from below middle education level so should use media like TV, radio and health talk.
A Comparative Study Of Prevalence, Awareness, Treatment And Control Of Hypertension Among Four Unique Ethnic Minorities In Yunnan Province

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Background
The aim of this study was to examine prevalence rate, awareness, treatment and control of hypertension among four unique ethnic minorities in Yunnan province, and provide reference for future prevention and control of high blood pressure.

Methods
With stratified multi-stage sampling, a representative sample of 5532 permanent ethnic minority (Naxi, Lisu, Dai, and Jingpo ethnic) residents aged 35 years and over in Yunnan province were selected and investigated by a face-to-face questionnaire survey and physical examination. Chi-square test was used to compare different rates, and direct method was used to calculate the standardized rate.

Results
The overall prevalence rate of hypertension among four unique ethnic minorities was 33.9% (33.2% for males and 34.6% for females). For the Naxi, Lisu, Dai, and Jingpo ethnic minority residents, the standardized prevalence rate of hypertension was 25.4%, 18.2%, 52.6%, and 38.0%, awareness rate was 42.6%, 50.2%, 35.6%, and 28.0%, treatment rate was 28.1%, 28.2%, 28.3%, and 12.8%, and control rate was 8.6%, 8.0%, 8.1%, and 4.4%, respectively. Among four ethnic groups, Lisu ethnic residents had the lowest prevalence rate of hypertension, whereas the highest rate of prevalence was found in Dai ethnic (P<0.01). Lisu ethnic residents had the highest awareness rate of hypertension, whereas Jingpo ethnic had the lowest awareness rate of hypertension, whereas Jingpo ethnic had the lowest rate of hypertension compared to other three ethnic minorities (P<0.01). The women had higher awareness rate of hypertension than men among the four unique ethnic minorities (P<0.05).

Conclusions
There were significant differences in prevalence, awareness, treatment and control of hypertension among four unique ethnic minorities in Yunnan province. Future strategies for prevention and control of hypertension should take into account different ethnic characteristics.

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Keywords: Hypertension; prevalence; awareness; treatment; control

The Anxiety Present Situation And Influence Factors Analysis Of Male Partner Who Involved In Induced Abortion In A Hospital In Kunming

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Background
With the development of modern economy, people's attitude to sex has shifted, more and more unintended pregnancies happen, induced abortion has become a more common behavior. This process not only have a significant impact on the abortion of female physical and mental. It is also made male partner to produce different degrees of anxiety.

Objective
To understand the anxiety present situation of male partner who involved in induced abortion. Analysis of its influence factors, provide the theoretical basis for Post-Abortion Care. Methods A cross-sectional investigation was performed in outpatients in the department of gynecology in a hospital?and 205 male partner who involved in induced abortion were investigated by using self-designed questionnaire and Self-Rating Anxiety Scale.

Results
The anxiety score range of 205 investigation object was 28 to 70, average score was 44.5±8.358, the incidence of anxiety was 24.9%, so the incidence of anxiety in male partner who involved in induced abortion was less than female abortions.

Conclusion
When abortion occurs, the male partner’s anxiety will increase, thereby affecting the male partner with women for abortion care and concern, we should strengthen health education, Popularizing contraceptive knowledge.

Keywords: Induced abortion; Male partner; Anxiety
Prevalence Of Selected Risk Factors Of Non Communicable Diseases Among People In A Central Region Of Vietnam

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Background: Non communicable diseases (NCDs) is one of the leading causes of death in the world. Studies have showed that reduce the risk factors associated with these diseases; e.g. tobacco use, physical inactivity, unhealthy diet, harmful use of alcohol, raised blood pressure, overweight/obesity, hyperglycemia and hyperlipidemia; might decrease the risk of developing NCDs as well as its consequences on people and society. Many researches have been conducted to identify the prevalence of these risk factors worldwide. However, there have been limited research that investigated the prevalence of NCDs’ risk factors in a comprehensive way in Vietnam in general and Phu Vang district, a central region of Vietnam, in particular. Studies mainly focused on the prevalence or the burden of these diseases. Therefore, this study aims to (i) describe the prevalence of selected risk factor, including tobacco use, physical inactivity, unhealthy diet, harmful use of alcohol, raised blood pressure, overweight/obesity, hyperglycemia and hyperlipidemia; (ii) identify the factors that related to these selected risk factors of NCDs among people who live in the central region of Vietnam.

Methods: This cross-sectional study will be conducted in Phu Vang district of Thua Thien Hue province, a central region of Vietnam. One thousand two hundred and eighty people aged 25-64, living in Phu Vang District, will be chosen based on a multi-stage sampling. We will collect data via a face-to-face interview, from July to August of 2016. Number and percentage will be used to describe the prevalence of selected risk factors of NCDs. We used multiple logistics regression to identify the factors related to these risk factors. All analysis will be done in R program.

Results & Conclusions: Findings of this study will provide sufficient evidence for policy makers at district level and province level for making further decision to decrease the risk of developing NCDs.

Key words: Non-communicable diseases, risk factors, Vietnam.
Autism spectrum disorders (autistic spectrum disorder, ASD) is a disease which include phenotype broad groups, seriously affecting children’s health, with a high degree of clinical heterogeneity and cause neurodevelopmental, typical clinical symptoms include social interaction barrier, language barrier and stereotyped, repetitive behavior. ASD onset in early childhood, usually before the onset of the age of three, male incidence rate of 4 to 5 times higher than women. Wide trend of autism spectrum disorders has become a public health problem as well as harm to human health and social development, the urgent need for the community to come together to solve. Causes complex, currently recognized by the vast number of scholars etiology views include: the combined effects of genetic factors, environmental factors and two factors. In this paper, do a simple review of the cause of autism research progress at home and abroad in recent years about it.
The Effects Of Integrated Health Care Program On The Knowledge Of Hypertension, Diabetes And Nutrition, Blood, Body Composition, And Physical Fitness For The Prevention And Management Of NCD In Laos

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Purpose: The purpose of this study was to analyze the effects of integrated health care program on the knowledge of hypertension and diabetes, nutrition and eating habits, blood variables, and physical fitness for the prevention and management of NCDs in Laos.

Method: Subjects were selected between the ages of 40-59 who matched more than three of the following criteria: blood pressure, fasting blood sugar, waist circumference, triglyceride, and HDL cholesterol. The study took place over a period of eight weeks, three trials per week, and 120 minutes per each trial. Each trial consisted of 30 minutes health and nutrition education respectively, and one hour exercise. Health education consisted of knowledge of hypertension and diabetes, self-efficacy and self-care. Nutrition education contained eating habits and knowledge of nutrition. Physical fitness and WHR were measured. The paired t-test, independent t-test, and multiple regression were used via SPSS 20.0

Results

A. The effects of the integrated health care program

According to attendance, the subjects with high attendance increased their knowledge of hypertension, diabetes, nutrition, and muscle endurance. In addition, total cholesterol, triglyceride, percentage body fat, and visceral fat decreased. Meanwhile, blood pressure, fasting blood sugar, LDL and HDL, WHR, weight, BMI, muscle mass, and speed did not change.

B. Variables that affected NCD related health variables

The subjects with a number of social support, attendance rate, and human resources for using health services were able to reduce NCD related health variables significantly such as blood pressure, fasting blood sugar, LDL and HDL, triglyceride, WHR, weight, BMI, percentage body fat, muscle mass, and visceral fat. Meanwhile, gender, age, literacy, education, smoking, and alcohol consumption did not affect NCD related health variables.

Conclusion and Suggestion: The integrated health care program can improve the knowledge of hypertension, diabetes and nutrition, and muscle endurance. Attendance was a very important factor for this program to have a positive effect. In addition, motivation and active participation play key roles in the success. Therefore, we need to find a proper method to increase attendance and active participation. This study was funded by Academic Partnership Project of KOICA.

Associated Factors Towards Medication Compliance Among Patients Who Have Hypertension And Diabetes In Yunnan Province

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Background: The multimorbidity with hypertension and diabetes is not just a single patients with hypertension, nor individual diabetes patients, patients with hypertension, diabetes, and Yunnan province also lack of studies in this area. This study selected nanhua longchuan township health center of Yunnan for a case study.

Objectives: This research aims to explore the difference and analyze the influence factor of medication compliance in multimorbidity with hypertension and diabetes and in single with hypertension and diabetes and propose solutions in order to implement interventions in the future.

Method: This study will carry out the research by implementing a quantitative survey using existed data collection, one-on-one in-depth interviews, group interviews, non-participant observation, as well as other quantitative and qualitative research methods. All the data were Double-entered by EpiData and analyzed by SPSS statistical software package.

Result: In this study, we obtained 1912 effective questionnaire and 35 qualitative interviews. The medicine-taking compliance rate of 1912 patients (75.3%) were higher than men (71.0%) (P=0.041), illiteracy and semiliteracy group was lowest (61.7%) (P<0.05), medical bills with NCMS group (56.4%) was lower (P<0.001), daily exercise group (92.9%) was highest (P<0.05), psychological adjustment good group (76.8%) and according to the medical behavior group good group (77.9%) were higher than in general group (P<0.001).

Conclusion: Disease status, gender, educational level, medical expenses payment, frequency of exercise, psychological adjustment and as directed by the medical behavior was main factors of medication compliance. It is necessary to strengthen health education for the multimorbidity with hypertension and diabetes, medical, low level of education, pay medical bills with NCMS, often do not exercise, poor psychological adjustment and as directed by the medical behavior of the crowd as a chronic disease management the focus of the crowd.

Keywords: Multimorbidity with hypertension and diabetes; Hypertension; Diabetes; Medication compliance
Food Consumption Behavior And Exercise Of The Elderly With And Without Overweight In Khokkruad Subdistrict, Muang District, Nakonratchasima Province

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Background and Objective: Obesity and overweight is a major public health problem all over the world. The major cause of overweight is related to an excess of calorie intake and insufficient physical activity especially for the elderly. This study compared food consumption and exercise of elderly with and without overweight living in the Khokkruad sub district of the Muang district of the Nakonratchasima province.

Methods: A comparative cross-sectional analysis was conducted. A total of 322 elderly aged 60-80 years with and without overweight participated. Data were collected by questionnaire. Descriptive statistics were applied. Data were presented as percentage, mean, standard deviation, Z-score and 95%CI. For comparing the proportion of food consumption and physical exercise between groups the statistical significance level was set at p-value < 0.005.

Results: The majority of the participants were female, married, with primary school education. The knowledge about healthy food consumption with and without overweight were statistically significant on a moderate level of 80.8% and 68.3% respectively (p-value=0.011). The attitude of food consumption of the overweight elderly was with 52.7% on a moderate level and differed significantly from the attitude of those without overweight with 83.6% (p-value=0.000). Elderly with overweight had a moderate knowledge about the usefulness of exercise by 77.0% in comparison with the group without overweight of which 41.6% had a good knowledge about the usefulness of exercise (p-value=0.000). The attitude towards physical exercise of the elderly with and without overweight was good to 100% and 96.3%, respectively (p-value=0.013). Elderly without overweight physical exercised more than those with overweight (p-value=0.000).

Conclusions: Food consumption and exercise of the elderly with and without overweight are different.

Keywords: Food consumption, exercise, elderly, overweight

The State Of Stress, Anxiety And Depression In Nurses And Its Relation To Workload And Work Relationship, A Story In One Vietnamese Hospital

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Objectives: To determine the prevalence of stress, anxiety and depression and the relationship between workload, work relationship and mental health state in nurses.

Methods: A cross-sectional study was implemented in the Hospital in 2015. The self-reported questionnaires consisting of the Stress, Anxiety and Depression Scale 21, demographic and work information were sent to 787 working nurses. Descriptive analysis and multinomial logistic regression were applied to describe the results.

Results: The prevalence of stress, anxiety and depression were 18.5%, 39.8% and 13.2% respectively, mainly in mild and moderate levels. 26.5% nurses experienced one problem, 11.5% nurses had two and 7.5% nurses had three problems. Self-rate of high work pressure increased the risk of one problem by 2.257 (p=0.019) and the risk of two problems by 3.122 (p=0.032). Management responsibility, conflicts with superiors and not-good relationship with colleagues increased the risk of all three problems by 4.25 (p=0.012), 5.451 (p=0.004) and 4.494 (p=0.014) respectively.

Conclusions: The nurses in the Hospital are working under stressful conditions which affect their mental health. Solutions are essential to improve the current situation.

Keywords: Stress, anxiety, depression, nurses, DASS 21
Progress In Autism Spectrum Disorders Etiology

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Autism spectrum disorders (autistic spectrum disorder, ASD) has complex genetic landscape with high clinical heterogeneity, ASD causes neurodevelopmental disorder characterized by persistent difficulties in social communication and social interaction, coupled with restricted, repetitive patterns of behavior or interest. ASD begins in early childhood, particularly before three age, and the prevalence of male is 4 to 5 times higher than that of female. ASD has become one of public health issues, and not only harms human health, but has negative impact on social development. Therefore, it's imperative for different levels, including families, hospitals and government, to respond to ASD. Currently, the accepted ASD etiologies include genetic and environmental factors, and their interactions. This manuscript reviews the progress of ASD etiology from the three aspects mentioned above, and then presents some suggestions to prevent and control ASD.

Factors Associated With Malnutrition Among Children Aged 6 - 12 Years In Xaysathane District, Xayaboury Province

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Abstract

Rational and Justification: Nutrition status of children among 6-12 years is critical to determine health status, physical and mental development of the children. Children with good nutrition status will affect to health status of overall population. Malnutrition among children is greatest challenge for health sector. It is challenging to development of social-economic. The nutrition status among the children of Saysathan district, Xayabury province is not known.

Objectives: To explore the prevalence of malnutrition and factors with related to malnutrition status of children among 6-12 years at Saysathan district, Xayabury province.

Methodology: This study was analytically Cross-sectional design conducted between Aprils to July, 2015. Six villages were randomly selected from Saysathan district, Xayabury province. The sample was children aged ranged from 6-12 years old. Measurement weight and height of the children and interview parents with structure questionnaire was used to collect information. Data was entered into a program called WHO's the Program Anthropometric, 2005 and analyzed. To evaluate the number of malnutrition in children, we use the following calculation: Z-Score (weight and age), (height and age). Using STATA 11.0 to analysis with Univariate and Multiple Logistic regressions to report OR and 95% CI were used.

Results: Among 288 children, 44.1% was stunting (Height for Age) and 28.2% underweight (Weight for Age). Nearly half (47.3%) of parents had low knowledge on nutrition. The parents with low knowledge were more likely their children to be stunting than the parents with high knowledge 3.2 times (AOR=3.2; 95%CI: 1.1-9.1). Parents with no knowledge on 5 groups of food were more likely their children to be underweight 5.4 times (AOR=5.4; 95%CI: 1.3-22.3). Parents with no access to information have children with stunting than those who always got information on 10.3 times (AOR=10.3; 95% CI:1.0-98.5).

Conclusion and Recommendations: About half of children between 6-12 years old of the Saysathan district, Xayabury province had stunting. The parents had low knowledge on nutrition. There should be promoted health education on how significant nutrition and providing information for the parents, especially in remote ethnic areas.

Keywords: Malnutrition,knowledge, Height, Weight
Prevalence Of Highperglycemia In Pregnant Women Paksan District, Bolikhamxay Province

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Background: High blood sugar during pregnancy is the important public health problem. For instance, mothers have three times higher risk of infection than others, particularly urinary tract infection. Likewise, if pregnancy could not control blood glucose level during pregnancy, it could be developed gestational diabetes. The objective to study prevalence of high blood glucose levels among pregnancies in Paksan district, Bolikhamxay province.

Methodology: This is a cross-sectional study, which the target group was pregnant women in 2nd and 3rd semester. Face to face administered questionnaire was used and blood sugar test (Sugar test by finger distance) was applied. Descriptive statistic was use to analyse data to describe facts and also multiple logistic Regression was used to explore associated between variable and confounding, and identify the factors association with blood sugar ≥ 105 mg/dl.

Result: The prevalence of blood sugar ≥ 105 mg/dl of pregnant women was 30.8%. Dietary behavior, in pregnant included five groups of food regularly 5-6 months, was moderate, 12.8% is obtained calcium from having some kinds of insects. Knowledge about having nutrient food during pregnancy was low covering only 68.8%. Respondents perceived less of risk of high blood glucose during pregnant (51.2%) and also they have low comprehensive knowledge about complication of high blood glucose (46.4%). In terms of daily activity, regularly practice is cooking covered 98% and engaging with friends and relatives (71%) and 32% had exercise including walking in moderate level and slow walking. The associated factors to high blood glucose ≥105mg/dl at P-value<0.005 were age over 30 (OR=2.95%CI=1.1-3.6 P<0.05), regularly having sweet dessert (OR=2.6;95%CI=1.3-4.9) and sweet food for 5-6 time/week (OR=8.8;95%CI= 3.8-20.3) and exercise by slow walk and walking in moderate level (OR= 0.2; 95%CI= 0.1-4).

Conclusion: Regarding health checking during pregnancy, all pregnant women should have blood sugar test, especially age over 30 years old and provided health education on the awareness of having health checking and glucose blood test during pregnancy. There should improve dietary behavior and encourage pregnant women to have appropriate kind of exercise. Providing knowledge about the danger and complication of high blood glucose during pregnancy.

Perception On Betal Quid Chewing, Yangon And Mandalay, Myanmar

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Background: Myanmar is one of the highest tobacco consumption countries in the word. Among all forms of tobacco use, betel quid chewing is common in Myanmar. According to 2001 sentinel surveillance study, 33.8% male and 11.2% female used betel quid.

Objective: To explore the perception of betel quid chewing habit among chewer and non-chewer and describe the socio-cultural perspectives, attitude and belief among betel quid chewer and non-betel chewer.

Methods: Purposive study was done. Six focus group discussions were done in Mingalardon Township, Yangon Region and Six focus group discussions were done in Pyigyidagon township, Mandalay Region to explore perception on Betel quid chewing. Seven to thirteen persons participated in each group.

Results: The youngest participant was 18 years old and oldest being 71. All were Buddhists except a Christian man and woman. Their betel chewing experience ranged from minimum 6 years to maximum 25 years. One of them started betel chewing since 7 years old. All the non-betel chewing participants responded that they didn't like the habit of tobacco quid chewing. Betel quid chewer stated that reasons for Betel quid chewing were to get rid of boring, to be awaken, to relieve toothache, and to test the tastes. All agreed that the cost of betel quid was very high that the cost of betel chewing can cover the cost of meal for a day. Regarding the traditional use, some argued that people previously used it only at their homes to serve their guests but it had been commercialized now. Most said traditional tobacco ingredients in preparation of betel quid were simple such as betel leaf, lime and areca nuts. Nowadays betel quid chewer used imported tobacco in the preparation of betel quid such as 92 and Queen.

Conclusion: Almost all participants stated that the trend of betel quid chewing habit is increasing in recent years. The prevalence is also increasing among female population. Many of them suggested betel quid should be controlled by laws, regulations.

Keywords: Focus group discussion, Betel quid chewing
Reactivating Of Physical Health And Ability Of The Participants To Prepare For Disasters With Fasting Integrated With The Eastern Philosophy Named Dao De Jing

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Background: The preparedness to deal with disasters is urgent issue. An alternative which arrange daily readiness is periodic fasting. Which the research was aimed to assess the reactivats of physical health, mind power, and the winning self of 40 participants who practice fasting for 7 days based on Eastern philosophy named Dao De Jing.

Method: The study group has adequate experiences on Dao De Xinxi activities include boxing dance, physical activity, chant Dao De Xinxi song, and meditation as their daily life. The participants spent daily life Dao De Xin Xi activities together with fasting for 7 days, and had to walk not less than 10 kilometers per day. The body composition, sphygmomanometer, and experience record form were used for data collection. Descriptive statistics, paired t-test and content analysis were employed for data analyses.

Results: The results revealed that physical health of participants were better in statistically significant p <.05 on fat percent, fat mass, visceral fat rating, muscle mass, blood pressure, body mass index, metabolic age and degree of obesity. Most of them could raise mental level, respectfulness, powerful, happiness and concentration, winning self, discourages difficulties, felt more agile and firmed body.

Conclusion: Fasting integrated Dao De Jing activities program is one approach to prepare for disasters. It was proved that drinking only water with continuous activities the body can survive with better health for at least seven days. Thus, the practice of fasting encompasses the activities based on Eastern philosophy named Dao De Jing is preparedness appropriately.

Keyword: reactivate, physical health , ability , disasters , Dao De Jing

Analysis Of Hiv/Hcv Co-Infected Patients Receiving New Drug Treatment

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Background: Viral hepatitis(HCV) is caused by hepatitis c virus infection. The virus since 1989 found has become a serious public health problem worldwide;there are about 40 million HCV infected people in china and at least 10 million chronic hepatitis c patients. There are the same route of transmissions include blood transmission, sexual transmission, mother to child transmission, so it is easy for people to get HIV and HCV virus co-infection. It will accelerate the deterioration of disease when HIV and HCV interactions. Chronic liver disease caused by HCV co-infected patients is one of the main causes of death during people living with HIV.

Objective: Investigating HCV infection status of patients who get HIV/HCV infection and take medicine in outpatient service of antiviral treatment. Analyzing their wills of accept hepatitis c drugs.

Methods: From January 2016 to March, in Kunming, Yunnan Province, HIV/HCV co-infected patients in some antiviral outpatient is recruited to do an cross-sectional study. Investigating some information about them, such as , demographic information, acceptability of new drugs, the demand for prevention and control of hepatitis c. Establishing a database by using EpiData3.1, doing descriptive statistical analysis by SPSS17.0.

Results: 298 patients with HIV/HCV were recruited in total. Average age of 43.4±5.7,Male 204 cases(68.5%);HIV/HCV co-infected persons were mainly drug users (78.4%), and the main way of infection was sharing needles with others (62.4%); Willing to accept new drugs to treat and willing to hepatitis C liver function were detected, respectively accounting for 82.5%, 96.3%, 62.7%.It's hopeful to treat hepatitis C virus (HCV)for free like HIV antiviral; Assessing the degree of liver fibrosis by FIB-4 non-invasive indicator, there are 64.5% patients that the degree of liver fibrosis is in F2 level and above .

Conclusion: HIV / HCV co-infected patients would like to accept the new drug to treat hepatitis C, they hope the government can provide free treatment. At the same time, the degree of liver fibrosis is more serious during the crowd. It is important to cause enough attention, treatment of hepatitis c is urgently needed.

Keywords: HIV/HCV co-infection ; Hepatitis c treatment ; Treatment intention;
Self–Efficacy And Social Support Application With Nutrition Education On Dental Caries Disease Prevention In Grade 6 Primary School Students, Khonkaen Province.

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Background: This quasi experimental research aims to investigate the application of self-efficacy and social support theories with nutrition education providing of dental caries to primary school student grade 6 in Khon Kaen province.

Methods: The sample was divided into 2 groups are 34 students of experimental group and 34 students of control group. The sample groups would do the activities set up through the researcher, the duration of this operation were among 8 weeks, the data was collected by questionnaires, the descriptive statistics, which is comparison of the average scores i.e. paired t-test and independent t-test, is used to analyze the general information.

Results: From the result, the experimental group had the average dental caries knowledge score and the average food consumption knowledge score of 6.5 and 8.88, respectively. For the control group, the average dental caries knowledge score and the average food consumption knowledge score are 4.91 and 6.44, respectively. For the self-efficacy and social support, the average score of the experimental and control group are 2.59 and 2.11, respectively. Finally, the average score of the dental caries prevention behavior of the experimental are higher than the control group with 2.46 and 2.06, respectively.

Conclusions: We can conclude that the average score of dental caries knowledge, food consumption knowledge, self-efficacy and social support, and behavior on dental caries of the experimental group is higher than that of the control group significantly (p-value <0.05). Moreover, the average score of microorganism plaque quantity of the experimental group is lower than that of the control group significantly (p-value <0.05). So it can concluded that self–efficacy and social support application with nutrition education can prevent dental caries disease in Grade 6 Primary School Students, KhonKaen Province.

Keyword: self – efficacy, social support, nutrition education, dental caries disease

The Effects Of Dental Health Education Program On Behavioral Modification For Periodontitis Among Type 2 Diabetes Patients In Khong-Chai District Kalasin Province.

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This study is quasi-experimental research and aimed to study the effects of dental health education program on behavioral modification for periodontitis among type 2 diabetes patients in Khong-Chai District Kalasin Province. Systematic random sampling was type 2 diabetes patients with gingivitis. They were divided into an experimental and a comparison group of 30 participants each. The experimental group received dental health education program by applying self-efficacy theory and group process. Include integrating lectures, video, group discussion, demonstration, tooth brushing and dental floss using 5 times and follow up 7 times in12 weeks. The data was collected by questionnaires dental examination records, plaque index score, and examination records gums state. and was analyzed by descriptive statistic: frequency distribution percentage, mean, standard deviation and ferrential statistic: paired t test, independent t test at 0.05 level of significantly.

The results revealed as follow after the study the experimental group gained significantly higher mean scores in knowledge, Perceived Self-Efficacy, Outcome expectation, and practice for periodontitis prevention than the comparison group, gained significantly (p-value<0.001), Dental plaque and gingivitis status of experimental group more decreased significantly than before experimental and comparison group(p-value<0.001), and more decreased than before the experiment (p-value<0.001). Recommendation: it is should be to promote dental health education by dental floss using and brushing continuously. It will be improve oral health.

Keyword: Behavioral modification by self-efficacy theory, type 2 diabetes patients with gingivitis
The overweight was risk factor for chronic disease such as diabetes, hypertension and hyperlipidemia. Excess weight also increases Village Health Volunteers chances of developing other problems linked to strokes, including high cholesterol, high blood sugar, and heart disease. The objectives of this quasi-experimental were to examine the effect of health behavioral modification program to reductive weight among village health volunteers in Pratumratchawongsa District Amnatcharoen Province. Simple random sampling were were 76 Village Health Volunteers (VHV), 38 were in the experimental group and 36 were in the comparison group. The self-efficacy theory, and group process were applied to develop a conceptual framework for experimental group. The experimental group received the intervention activities included a lecture supported by a video show, food consumption, BMI, training about exercise, group discussions, exchange of experience of reductive weight session, a video model, an individual model, a handbook, health behavioral records in 12 weeks. The comparison group received regular lessons. Data were collected by questionnaires and health behavioral records. Data was analyzed by descriptive statistic: frequency distribution percentage, mean, standard deviation and inferential statistic: paired t test, independent t test at 0.05 level of significance.

The results revealed as follow after the study the experimental group gained significantly higher mean scores in knowledge about overweight, Perceived Self-Efficacy for control overweight, Outcome expectation for reductive weight, and practice for food consumption and exercise than before experimental and the comparison group (p-value<0.001), gained significantly lower mean scores of body mass index (BMI) and girth than before experimental (p-value<0.001).

Recommendation: it is should be to promote the reductive weight network of Village Health Volunteers (VHV) continuously. It will be improve health status.

Keywords: Behavioral modification by self-efficacy theory, reductive weight of Village Health Volunteers,
The Effectiveness Of A Program Based On Health Belief Model And Social Support To Promote Breast Self-Examination In Women Aged 35-60 Years In Kudkung Subdistrict Kumkeunkaew District, Yasothon Province.

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This quasi–experimental research aimed to study the effectiveness based on health belief model and social support to promote breast self-examination in women aged 35-60 years in Kudkung Subdistrict Kumkeunkaew District, Yasothon Province. The samples were 78 women and divided two group. The experimental group was 38 women and the comparison group was 38 women. The experimental group received the intervention to 6 times in 12 weeks. Include integrating, lectures, video, group discussion, hand-book, brochures, pamphlets, breast examination demonstration and breast self-examinational practice. the comparison group received regular lessons. The data were collected through pretest and post test by questionnaires. The data were analyzed by descriptive analysis of the percentage, standard deviation. Means compared with a record independent t-test and paired t-test determined statistical significance at 0.05 level of confidence and the results showed the 95% CI. The results revealed as follows: After the experiment, The experimental group had mean scores of knowledge about breast cancer and breast self-examination, perceived susceptibility, perceived severity, perceived cost and benefits and barriers, perceived health motivation to breast self-examination and breast self-examinational practice were higher significantly than the before experiment and comparison group (p-value<0.001).

The Situation Of Physical Exercise Behaviors And Their Associated Factors Of Elderly People In Kokha Municipality Area, Kokha District, Lampang Province.

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This research is a descriptive study, focusing on Kokha Sub-district Municipality in Kokha, Lampang. It aims to study 1) conditions of behavior under elderly exercise, 2) personal, predisposing, enabling, and reinforcing factors that are related to the exercise behavior of the elderly. 287 samples from simple sampling have been observed, collected and interviewed with qualified research tools. The applied statistics were frequency, percentage, mean, standard deviation, Chi-Square test, and Pearson correlation coefficient.

The results are: 1) The average elderly exercise behavior is at regular level. 2) Predisposing factors as knowledge of elderly exercise, benefits and self-awareness are at high level. However, the awareness of exercise risk is at low level. Enabling factors as the levels of public access to municipality exercise zone, living in a residence where exercise area is included, owning or operating exercise equipment are at high level. Reinforcing factors as receiving advice from exercise experts are at high level, information received on the exercise activities of the municipality is moderate. 3) The factors such as age, education, and income, knowledge based on elderly exercise, benefits of exercise, and exercise self-awareness, public access to municipality exercise zone, living in a residence where exercise area is included, owning or operating exercise equipment, receiving advice from exercise experts and receiving information on the exercise activities of the municipality, also have a significant impact on their exercise behavior. (p-value <0.05)

The research results suggest that there should be a plan to promote physical elderly exercise behaviors taking into account the different types of personal factors and the increased self-efficacy of the elderly themselves. The plan should include model development activities that the elderly could successfully perform, which could convince them to recognize the value of the elderly to exercise more. In addition, the promotion of physical activities could be carried out through provision of relevant information by the municipality aiming at increased public participation in a community for the elderly to exercise continuously.

Keywords: exercise behavior, elderly
Quality Of Life And Related Factors Among People Living With HIV In Quang Tri Province, Vietnam

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BACKGROUND: HIV infection is a global growing pandemic, and it is considered a public health problem. Due to the characteristics of the disease made people with HIV difficult in their integration with the community life. This problem was seriously affecting on the their role and position in society led to the quality of life (QoL) of people living with HIV likely was lower than people with other chronic diseases. In Vietnam, the studies of QoL and related factors in people getting infected with HIV were still limited. Therefore, the study was conducted to measure QoL and related factors among people living with HIV in Quang Tri province, in 2016

METHODS: A cross-sectional descriptive study was performed with a quantitative study involving a convenience sample of 103 individuals, was combined with a qualitative study using focus group discussions and in-depth interviews with 20 individual patients. The WHOQoL-HIV-Bref instrument was used to assess QoL of people living with HIV over 31 evaluation items including 6 domains: satisfaction of physical health; Satisfaction on mental health; Satisfaction level of independence; Satisfaction of social relationships; Satisfaction of the environment; Satisfaction personal beliefs. The p values were established at <0.05.

RESULTS: The mean score of WHOQoL-HIV-Bref was 12.5 ±1.5 SD. The findings showed that people living with HIV was poor QoL accounted for 38.8%. There were 4 key factors relating to the poor QoL of people living with HIV as stable job (OR= 4.5, 95% CI: 1.5 - 13.5); low self esteem (OR=4.3, 95% CI: 1.6-11.4), ARV treatment (OR=6.2, 95% CI: 1.5 – 25.2) and clinical stages (OR=9.4, 95% CI: 1.1 - 77.2).

CONCLUSIONS: QoL of people living with HIV in the study area is rather low. The current job, low self esteem, clinical stages and ARV treatment's accessibility of the people living with HIV were associated with poor QoL. Intervention should use these research findings for policy making to improve better QoL of people living with HIV in locality.

Keywords: Quality of life, people living with HIV, Quang Tri province.

Traditional Pospartum Beliefs And Practices On Food Restriction And Hotbed Exposure Among Lao Women At Mother And Child Hospital, Vientiane, Lao P.D.R.

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Objective: To examine postpartum beliefs and practices on food restriction and exposure to hotbed among Lao women.

Methods: A descriptive, cross-sectional study was conducted among 140 randomly selected women who just give birth ~ 1 to 2 months. The information was collected at ANC clinic when the mothers brought their children for immunization. The survey questionnaires covered questions about beliefs and practices on food restriction and exposure to the hot bed during postpartum period. Data were entered and analyzed using SPSS 15.

Results: A total of 140 women was recruited. The average age was 28 years old. Majority of participants practiced food taboo (88.6%) and stayed on hotbed (80%) after delivery with an average period of 45 days and 15 days, respectively. Fifty – three percents of the mothers reported that they practiced food taboo in order to avoid convulsion and 44% of them said this was for the baby health reason. The reasons for staying on hotbed were to keep mother healthy and to facilitate blood circulation. The majority of interviewees followed the traditional postpartum practices irrespective of age, career, and education level.

Conclusion: Traditional postpartum beliefs and practices are still highly prevalent among Lao women. The elderly has a particularly high influence of the traditional postpartum beliefs and practices among young women. Furthermore, It tends to be increased in the future, suggesting all health professionals should not only provide the postpartum care to the patient but also their family members.

Key words: food taboo/restriction, exposure to hot bed, Laos PDR, beliefs
Lipolytic Bacteria Separation From Grease Traps For High Grease And Oil Contaminated Waste-water Treatment

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Background and objective: Grease and oil contamination is part of water pollutant that affects on human health. It cause putrid water sources, unsightly conditions, and source of pathogenic carrier reproduction. This research aimed to separate, select, and study the characteristic and distribution of lipolytic bacteria from grease traps to treat grease and oil contaminated wastewater.

Methods: Twelve samples of grease sludge waste were collected from two grease traps in a university canteen and a pork processing factory. Grease samples were obtained from top and side of grease trap and from wastewater in the grease trap. Each area collected two samples. Lipolytic bacteria was separated and selected on tributyrin agar plate at the same time as total plate count. The nutrient agar was used as media. A vernier caliper was used as a tool to measure clear zone of bacteria. The diameter of the clear zone should up to 0.05 mm. for efficacy ranking. Chromogenic agar containing olive oil as substrate was used as the confirmatory testing.

Results: The result from canteen grease trap showed that the number of lipolytic bacteria distributed at a side, wastewater and top of grease trap were 8.50±0.24 x10^5, 1.38±0.31 x10^5 and 0.73±0.05 x10^5 CFU/mL, respectively. The pork processing factory had the lipolytic bacteria in top, side and wastewater in the grease trap were 590.00±28.28 x10^5, 130±10.00 x10^5 and 9.75±1.77 x10^5 CFU/mL, respectively. In addition, 8 isolates of lipolytic bacteria from canteen grease trap and 74 isolates from pork processing factory had both clear zone greater than or equal 3 mm. and lipid digesting confirm test.

Conclusions: In top and side of grease trap from pork processing factory had more lipolytic bacteria than from a university canteen obviously. The top three isolation of clear zone characteristic obtained from a side and a top grease sludge from grease trap of pork processing factory and wastewater from grease trap of canteen respectively.

Keywords: Lipolytic bacteria , Grease and Oil, grease trap
The purposes of this research are: 1) to study correspondence between policy and the implementation of Health Promotion for the elderly of Lampang City Municipality, Thailand; and 2) to analyze supporting and obstacle factors in such implementation. This research used qualitative method. Data was collected by documentary research and interview and analyzed for coincidence of equilibrium, completeness of procedure, and relative dynamic. Correspondence between policy and implementation for content validity was derived.

Results were that health promotion policy and the implementation among the elderly of Lampang City Municipality corresponded with coincidence of equilibrium, completeness of procedure and relative dynamic. Policy data matched implementation data, so coinciding equilibrium linked the elderly status to policy sets creating projects, health promotion implementing related policies. For completeness, Lampang City Municipality has procedures transforming policies into sets of programs. Procedures start with understanding policy objectives, situation and data analysis, drawing projects and presenting proposals to authorities. In the relative dynamic, health promotion can provide a satisfactory response to local needs. Supporting factors include clear administration, strategies, objectives, activities, and administrative policies as well as sufficient budget and crediting colleagues. Personnel with knowledge, competence, experience, skill, friendliness, understanding, and ability to work with the community are also essential. Cooperation from community health volunteers, the elderly, and communities are also necessary. Personnel and team development focusing on up-to-date working methods are other factors. Obstacles include delays in receiving budgets and political issues, lack of cooperation from some elderly people, and insufficient facilities for bedridden or impoverished elderly people.

The result from this study has created some suggestions for Lampang City Municipality to improve their health promotion programs for elderly people. Firstly, Lampang City Municipality should make a set of permanent policies focusing specifically on elderly people. Secondly, the Municipality should create permanent plans for health promotion in Elderly People programs. Thirdly, the Municipality should support the participation from private sectors in the programs. Lastly, the Municipality should provide training for those approaching old age to become well prepared.

Keywords: Policy, Health Promotion, Elderly People
Effect Of Behavioral Modification For Opisthorchiasis Prevention By Participation Of Family Health Leader

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Background: Opisthorchiasis is a serious public health problem in the Northeast of Thailand because the people in this area like to consume raw fish food. The study aimed to test a behavioral modification program to consume cooked fish food.

Methods: This research is a quasi-experimental research that composed of 80 participants who were divided into two groups: an experimental group (n=40) and a control group (n=40). The experimental group was received behavioral modification program to prevent Opisthorchiasis. Activities in the program included group discussions, and modeling, the exchange learning experience, assessment by peer group, and home visits. The duration of this study was 12 weeks. Data collecting was used by a questionnaire. Data were analyzed by descriptive statistics. Comparative means score within-groups using Paired test and between-groups using Independent t-test were done at level of significant 0.05.

Results: After interventions, the experimental group had significantly higher mean scores of knowledge about Opisthorchiasis, the perceived susceptibility, the perceived severity, the perceived benefits of prevention and practice to prevent Opisthorchiasis than those before the interventions and the comparison group (p-value <0.001).

Conclusions: The behavioral modification program was effective for preventing opisthorchiasis. The key persons to change behavior are family health leaders.

Keywords: Participation, Opisthorchiasis, Behavioral modification, family health leaders

Lifestyle For Health Promoting Of Depressed People In Thung Hua Chang District, Lamphun Province

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The study design was analytical cross-sectional study. The purposes of the study objectives were to survey a promoting health behavior and to study association of personnel characteristics with the promoting health behavior of depressed people in Thung Hua Chang District, Lamphun Province. The sample sizes were 444 depressed people. Data collection method was using questionnaire. Chi-square test was used for explored association between the personnel characteristics and the promoting health behavior.

The result found that the depressed peoples were female 76.4% and male 23.6%. In overall of promoting health behavior was on a moderate level. However, when considering in each item of promoting health behavior found that the interaction among individuals, the responsibility for their own health, and nutrition were on high level. Spiritual development and the stress management were on the moderate level. The promoting health behavior for physical activity was on low level. Characteristic factors which associated with the overall promoting health were age, education level, occupation and monthly income (p-value<0.05). Depressed people whose take and without taking the anti-depression drugs found that no statistically significant difference (p-value = 0.100).

The first priority of public health personnel role on depressed people in the community should be focused on promoting health for physical activity. And the depressed people who had low scores of promoting health behavior assessment need the guideline for surveillance, monitoring and care continuously.

Keywords: Health Promoting Behaviors, Depression, Thung Hua Chang District
Factor Associated With The Practice Of “Five Por ” In The Prevention Of Dengue Among Household In Boten District, Xaignabuly Province, Lao PDR.

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Background: 5-por is a practice prevention media campaign method to prevent dengue fever outbreak. Inappropriate and miss practicing 5-Por are caused of Dengue outbreak and affected to health of people in community. Factors related to dengue prevention of the study will be use for local result base planning of Public health. Dengue prevention is in line with MDG6 and to know of the relative factors to the of Dengue prevent 5-Por practice of households to help bring the decision in planning local joint in public health activities.

Objective: To study the factors related to Dengue prevention by 5-Por practice of household at Boten District, Xaignabuli province, Laos.

Methodology: This study is Quantitative Descriptive; Cross-Sectional study. Questionnaire was used for data collection. There are 278 sample size. The target of sample population is household head at 5 villages in municipality and other 5 remote area villages of Boten District Xaignabuly province. Period of Implementation on March 2015 and data was analysed by Program Stata11. The basic statistic such as frequency, percentage, minimum and maximum, mean, standard deviation were analysed. Multiple Logistic Regression was used for analyse relationship between outcome variable.

Result: More than half of households samples (51.4%) were practiced 5-por for Dengue prevention. Nearly half of participants (48.56%) didn’t practice 5 Por. Participants who have education level upper high school were practiced 5-Pors 2.8 times more than who graduated high school level. (OR: 2.8; 95%CI: 1.2-6.4). Family income was significant with practiced 5-por for Dengue prevention (OR: 0.9; 95%CI: 0.9-1.0). Participants who had basic knowledge on Dengue fever prevention had 2.8 times practiced on 5-Por more than who have low knowledge on Dengue fever prevention. (OR: 2.4; 95%CI: 1.1-5.2). Household head who have social supported on Dengue prevention were implemented 2.2 times more than who received low social support. (OR: 2.2; 95%CI: 1.2-4.4). The resulted of study was shown nearly half of participants didn’t had good practiced 5-Por for Dengue fever prevention. Social support in Dengue prevention, such as health education, inspection, compliment, instructions order to the community should be consider.

Keywords: Practice, Five Por, Prevention, Dengue

Help-Seeking Behavior For Mental Health Problems And Associated Factors Among Medical Students

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Background: The most of medical students at high risk for mental health problems have no knowledge and right attitude in coping or seeking help when necessary. To examine the proportion of help-seeking behavior for depression, anxiety and stress among medical students and its related factors in Hue University of Medicine and Pharmacy, Vietnam.

Methods: Mixing qualitative and quantitative methods. The quantitative was conducted first and the qualitative was supplement for the quantitative component. 525 students of Faculty of Public Health in Hue University of Medicine and Pharmacy Vietnam were selected using multi-stage probability sampling method. For the qualitative part, we conducted 5 focus group discussing, chose 40 students by level of depression, anxiety, stress, gender and grade. Help-seeking was measured using the General Help Seeking Questionnaire (GHSQ) and the Attitude toward seeking psychological professional helps (ATSPPH). The Depression Anxiety and Stress Scales 21 (DASS-21) used to assess the level of depression, anxiety, and stress.

Results: The proportion of help-seeking behavior for mental health problems among medical students is 82.6%; the main sources of help-seeking include closefriends (71%), parents (62.6%) while there are few the number of students go to psychological specialists for help-seeking (15%). Lower level of depression remained significantly associated with having more help-seeking behavior (OR=1.46, 95% CI: 1.04-2.06).

Conclusion: The paper considers the implications of the findings for the development of interventions to encourage medical students to seek help for their mental health problems.

Keywords: help-seeking behavior, mental health, medical students.
The Effects Of An Application Of Health Belief Model With Social Support To The Breast Self Examinative Health Promotion Among Reproductive Women In Sichomphu District Khon Kaen Province

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This research is quasi-experimental design aimed to assess the effectiveness of an application of health belief model with social support to the breast self-examinative health promotion among reproductive women in Sichomphu District Khon Kaen Province. The samples are 80 women aged between 20 to 49 years old and divided into two groups: the experimental group of 40 women and the comparison group of 40 women. The experimental group received the intervention program. The program consisted of integrated activities involving lectures with slides, videos, flip charts of breast self-examination, small group discussions, demonstration and breast self-examination, matching to breast examination, and CD song to breast self-examination. The comparison group received regular lessons. Data were collected by questionnaires, breast self-examinative records. Data was analyzed by descriptive statistics: frequency distribution percentage, mean, standard deviation, and inferential statistics: paired t-test, independent t-test at 0.05 level of significance.

Results: At the end of the 12 weeks intervention program, it was shown that the experimental group had a mean score higher than before the experimental and higher than the comparison group for knowledge of breast cancer, breast self-examination, perceived susceptibility of breast cancer, perceived severity of breast cancer, perceived cost and benefits and barriers to prevent breast cancer, perceived health motivation to breast self-examination, and practice to breast self-examination. These were higher significantly different (p-value <0.001) at 95 CI. The research shows that the interventional program of an application of health belief model with social support to breast self-examination and prevent breast cancer in reproductive women.

Recommendation: It should be breast self-examinative campaign in the community every year.

Health Belief Model For Preventive Complication In Type 2 Diabetes Mellitus Patients, Kudpladuk Suddistrict, Chuenchom District, Mahasarakham Province.

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Khon Kaen University

This study was descriptive study which to study health belief model for preventive complication in type 2 diabetes mellitus patients. The sample was 64 patients by simple random sampling. Data was collected by questionnaire during May to July 2015. Descriptive analysis of the frequency, percentage, standard deviation. The majority of women (61.1%) was more than men (38.9%). Average of ages was 50.08 years (SD= 7.34) average of duration in type 2 diabetes mellitus was 5.86 year (SD= 2.62). The knowledge of diabetes mellitus and complication prevention from diabetes mellitus, the perception of risk of complication prevention from diabetes mellitus, the perception of severity of complication prevention from Diabetes Mellitus, the perception of benefit and obstacle in complication prevention from Diabetes Mellitus, was high level by average (80.6%, 91.7%, 94.4%, and 66.7%). The practice of complication prevention from Diabetes Mellitus was level (75.00%) fasting blood sugar was more than 180 mg% (66.7% average 140 mg (SD= 1.42)) The low level of fasting blood sugar was 104 mg and the high level of fasting blood sugar was 206 mg.

Recommendation: The member of their family should promoting self-care behavior of patients in food, exercise, meditation, foot, drug, doctor appointment, of delay complication prevention from Diabetes Mellitus.
The Effectiveness Of A Health Education Program Based On The Health Belief Model And Social Support For Preventive Complication In Type 2 Diabetes Mellitus Patients: A Case Study At Bandonsawan Health Promoting Hospital, Kudpladuk Sudistrict, Chuencom D

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ABSTRACT
This was a Quasi-experimental research aimed to the effectiveness of a health education program based on the health belief model and social support for complication prevention in type 2 diabetes mellitus. The samples were 64 diabetes mellitus patients ages 35-65 years. Samples were divided into two groups, such as experimental group was 32 patients and comparison group was 32 patients. The experimental group received the health education program by applying health belief model and social support theory, including lectures, video presentation, group discussion, real model use, food demonstration, meditational practice, brochures, and handouts. The experimental group received the treatment for 6 times, including 12 weeks. The comparison group received regular lessons. The data were collected by questionnaires. The general data was analyzed by descriptive statistics including percentage, mean, and standard deviation. The comparative data was analyzed by Independent t-test and Paired sample t-test at the significant level of 0.05. The results showed that the experimental group had knowledge of diabetes mellitus and complication in type 2 diabetes mellitus, the perception of susceptibility of complication in diabetes mellitus, the perception of severity of complication from diabetes mellitus, the perception of cost, benefit, and barrier of complication from diabetes mellitus. The perception of health motivation to self-care for prevention of complication from diabetes mellitus and practices to prevent of complication from diabetes mellitus. A level of means were higher than before the intervention and comparison group. The difference is statistically significant (p-value<0.001).

Knowledge, Practice Of Kitchen Staffs And The Situation Of Food Safety In Kindergartens And Primary Schools In Dong Hoi City In 2016

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Background: Food safety has been recognized as the most important national issues, especially at the kindergarten and primary school. However, there hasn’t been much research on food safety in these settings. Therefore, we conducted the research on knowledge, practice of employees working in kitchens and the current situation of food safety among kindergartens and primary schools in Dong Hoi city in 2016. Objectives: (1) Survey the knowledge and practice of cooking in the city’s kindergartens and primary schools. (2) Describe the current situation of food safety and hygiene in the school kitchens of Dong Hoi city.

Method: This was a cross-sectional study. Samples were 36 kitchens and 170 kitchen staff working at kindergartens and primary schools in Dong Hoi City.

Results: 68.2% of cooking staff had the right knowledge on food safety; 94.8% of employees working in the kitchen had correct practice of food safety. The current situation of food safety and hygiene: kitchens with suitable ventilating and lighting systems were about 14% and 17%, respectively. Only 55.6% of facilities were equipped with insects and pets prevention; the proportion of food storage cabinets meeting the standards was 25%. All of the kitchen staff were examined health on a regular check up and wore the personal protection equipment while working.

Conclusions: Knowledge of research subjects was not high, most kitchen staff practice right on food safety and hygiene. The situation of facilities and equipment for food preservation in several kitchens did not fulfill the demands.

Keywords: kitchens, food safety.
Background: The phenomenon of homosexuality is one which still requires ongoing research. Some countries such as the Netherlands, Belgium, Spain and Sweden have allowed gay marriage while in Asia, the views of homosexuality are mostly negative. In Viet Nam the attitude of community towards lesbians and gays is largely prejudicial and wary. There are very few studies on social attitudes towards gays in Hue city. This study aims to (i) assess awareness and attitudes towards homosexuality of students in the Public Health faculty, Hue University of Medicine and Pharmacy in 2016;(ii) find some factors related to awareness and attitudes towards homosexuality in study population.

Methods: This was a cross-sectional study. Study population was 398 preventive medicine and public health students of regular program of Hue University of Medicine and Pharmacy. Data was collected via a self-filled questionnaire from May to July 2016. We used descriptive statistics to describe awareness and attitudes towards homosexuality of students, chi square test to test the association between specific factors and awareness and attitudes towards homosexuality among students. All analysis was performed by SPSS 18.0.

Results: The Public Health students’ awareness about gays and lesbians was 97.5 %, 20.4% of students had negative attitude toward gays and lesbians. Studied showed that male students were more likely to have more negative attitude towards homosexuals than female (36.5% vs 14.3%, p<0.05).Students with the salary ranging from 50 to 150 US had more positive attitudes towards homosexuals than those who earned less than 50 US per month (82.6% vs 69.5%, p <0.05). The relationship with attitudes and other factors did not exist.

Conclusion: While the majority of students have awareness about homosexuals, significant numbers still held very negative views of gays and lesbians, majority of them were male and those who had monthly income of less than 50 US. Therefore, it is important to provide training programs to discuss the issue of homosexuality in order to encourage greater tolerance, and also making healthcare for society more effective.

Keywords: Homosexuality, Awareness, Attitudes, Students, Vietnam.
Background and Purpose
Healthcare-associated infection (HCAI) is a major patient safety issue and affects millions of patients around the world. One of the simplest, most effective and economical options for reducing the incidence of HCAI is to increase healthcare provider’s hand hygiene compliance. However, no previous studies have been conducted in Cambodia concerning hand hygiene among health care providers, and sufficient data on HCAI is unavailable. In this regard, this study aims to provide basic data for HCAI prevention by identifying the knowledge, perception, and performance of hand hygiene among hospital nurses in Cambodia, and ultimately contribute to reducing HCAI incidence in the country.

Methods
Participants are 256 Nurses who work in CPA level 3 hospitals in Phnom Penh, Cambodia. We perform observational investigation of hand hygiene compliance rates and a survey on knowledge and perception of hand hygiene. The survey will use two questionnaires provided by WHO (2009): “Hand Hygiene Knowledge Questionnaire for Healthcare Workers” and “Perception Survey for Healthcare Workers.” Data will be collected during 2 months (July 2016 – August 2016).

Data Analysis
Descriptive statistical analysis will be carried out regarding the knowledge and perception of Cambodian nurses in intensive care units on the basis of the hand hygiene knowledge surveys. Hand hygiene compliance rates will be calculated. The correlation between scores on hand hygiene knowledge and perception and scores on the hand hygiene compliance will then be analyzed.

Expected Results
In the short term, this study is expected to improve the knowledge and perception of and compliance with hand hygiene among nurses working at CPA-3 hospitals in Phnom Penh, Cambodia. In addition, this research will provide basic data on HCAI, and based on this data subsequent studies will be conducted that can hopefully bring about a reduction in HCAI incidence in Cambodia over the long term.

A Cross-Sectional Study Of Hiv/Aids Stigma Among Healthcare Providers In Healthcare Settings In Kunming
Zhang Ruobing1
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Objective: Healthcare provides HIV/AIDS discrimination become barriers to access to health care among HIV/AIDS. A cross-sectional study conducted in two hospital of Kunming in order to further understand the current situation of the healthcare provides HIV/AIDS stigma and its influencing factors. Methods: Consecutively collect all healthcare providers’ data for HIV/AIDS patients’ admission from January to February 2015 in two hospitals that concentrated majority of HIV/AIDS patients in Kunming. There were 157 eligible questionnaires. Results: The age is 4.52±10.58 years old. Female and male accounted for 89.81% (141/157) and 89.81% (16/157) respectively. Those who have married and lived together accounted for 65.60% (103/157), following those who are single accounting for 30.57% (48/157) and 3.82% of divorced and separated. The majority of education is college degree accounting for 73.89%, among which nurses accounted for 56.05% (88/157) and clinical doctors accounted for 35.02% (55/157). It showed that scores of healthcare providers HIV/AIDS stigma in different housing types (x2=12.45, P < 0.05), different personal monthly income before tax (x2 = 16.5, P < 16.5) and family monthly income before tax (x2= 27.53, P < 0.05) were statistically significant. Results of logistic regression showed that scores of HIV/AIDS stigma among healthcare providers in different gender [(OR: 0.17 (0.04, 0.77)) and different family income [(OR: 5.06 (0.95, 0.95), 8.02 (16.5, 16.5), 0.95 (0.17, 5.25)] had significant difference. Conclusion: Healthcare provides HIV/AIDS stigma still exists mainly related to gender and personal income. It suggested that comprehensive measures such as health education and incentive system to reduce the HIV/AIDS stigma and improve more HIV/AIDS to access to healthcare.

keywords: HIV/AIDS stigma; Healthcare providers; A Cross-sectional study
An Evaluation Research On The Condom Promotion Project In Yunnan Province

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Kunming Medical University

Background: At present, the sexual transmission has already become the main route of transmission of HIV/AIDS in our country. Increasing the quantity of condom use, to prevention and control of HIV epidemic has the vital significance. Objective: A national condom promotion project was implemented from year 2002 to 2014 in Yunnan Province of China. An evaluation study was carried out for accessing the effectiveness of the project, as well as the key strategies and mechanism were summarized. Methodology: The study employed both quantitative and qualitative methods to collect the relevant information. Concretely, questionnaires, in-depth interviews, focus group discussion, non-participating observation were used. Availability, accessibility and acceptability of condom were evaluated following to the evaluation framework suggested by USCDC. Result: The innovational model of condom promotion project improves the availability, accessibility and acceptability of condoms. The free distribution of condoms and social marketing and market sales increases from 14.32 million in 2004 to 61 million in 2013, its growth is 3.3 times. A decade, the usage of condoms have been reached 343.05 million, satisfied the social needs of the use of condoms to prevent AIDS, and played a positive role in reducing the spread of HIV through sexual transmission. Conclusion: After ten years of effort, the condom promotion project have been made a progress from point to face, from micro to macro, from covert to open, from passive to active, from advocacy to implement and made a positive energy to curb the spread of AIDS through sexual transmission, guarantee the health and safety of the population in Yunnan, and promote the coordinated and sustainable development of economy and society.

Keywords: Condoms, AIDS, Effectiveness Evaluation

A Cross-Sectional Study About Anxiety In Patients With Extremity Disability Of Wuhua District, Kunming

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Objective: This paper makes a cross-sectional survey about anxiety in patients with extremity disability of Wuhua District, Kunming, investigating the anxiety status of the patients and the relevant positive rate and discovering the factors, which provides some basis for the psychological therapy for anxiety disorders of the patients. Method: A Symptoms of anxiety disorders self rating scale (SAS) and a self-designed questionnaire for the basic information were adopted in the thorough survey for the patients of extremity disability who lived in Wuhua district and had the certificates of disabled. Result: Of the 1660 patients with extremity disability, 534 were found with anxiety and the anxiety positive rate was 32.17%. Univariate analysis showed that for the anxiety positive rate, there were some age differences in the patients and the positive rate of patients aged over 75 was higher. There was no sex, ethnic groups and household types difference in the patients. For the standard score of SAS, there were some age, ethnic groups and household types differences and the general anxiety of the patients aged over 75 was negative. There was no sex difference. Conclusion: The anxiety of the patients with extremity disability was worse than both the average anxiety standard and adult anxiety standard in China, but better than that of the patients with mental disease. According to the univariate analysis, the positive rate of the patients might be related to the factor of age and might have no relationship with such factors as household types, sex and ethnic groups. However the anxiety emotion maybe connected with household types, age and ethnic groups and irrelevant with sex. In conclusion, the present anxiety disorder status of the patients with extremity disability of Wuhua District, kunming was not looking good and the paper provides some clues for the psychological rehabilitation therapy for the anxiety of the patients with extremity disability.

Key words: extremity disability, anxiety, A Symptoms of anxiety disorders self rating scale (SAS)
Reduction Of Maternal Death In Lao PDR By Moving From Maternal Death Review To Maternal Death Surveillance And Response

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Lao PDR is considered on track to achieve MDG 5 for its MMR target of 260 deaths per 100,000 live births by 2015. Even the Maternal Mortality Ratio was reduced from 905 per 100,000 live birth in 1990 to 197 death per 100,000 live births in 2015, but it is still highest in the region. Maternal death review was first introduced in Lao PDR in 2010 with the technical assistance of WHO and UNFPA, and since had been scaled up to be conducted in 9 provinces, including Vientiane Capital by 2013 and its is covered nationwide by 2015. Whenever a maternal death occurs either in the health facility or at the community level, the provincial reviewed team composed of obstetricians and public health officers visited the site to conduct an interview and complete the questionnaire. Thereafter, the report form is completed and ready for analysis, which concludes cause of death, factors contributed to death, recommendations and action plan for the immediate future. Three delays models is used to analyze such as delay regarding the decision making among women and family, delay regarding the socio-economic and environment and delay regarding the provision of good maternity care. But Maternal Death Review methods is still inadequate in term of follow up and monitoring of recommendation and action plan. Maternal Death Surveillance and Response which is consisting of 2 components such as surveillance including identification and review while response including recommendation and monitoring. Therefore in 2016, Lao government has the new strategies to reduce the preventable maternal death and MDSR is being started to implement in order to give better solution to improve quality of maternity care and reduce maternal mortality ratio.

Retention And Its Predictors Among Methadone Maintenance Treatment Clients: A Prospective Cohort Study In Yunnan Province, China

Ying Li1
1Kunming Medical University

Background: Currently, China’s MMT program is the largest single MMT program in the world. However, relatively low retention rate of MMT has been a concern for China’s MMT program ever since the first pilot was initiated. The primary objective of the prospective cohort study is to document the retention rate of MMT program and identify the factors associated with retention of MMT in Yunnan, China at the new phase of MMT program in Yunnan, China.

Methods: A prospective cohort study was employed in this study. 523 clients from the four selected MMT clinics from four city/prefectures of Yunnan Province were recruited into the cohort, beginning on January 2014 and followed up until September 2014. In total, 523 clients completed questionnaire interview at baseline and 204 clients who still remained in MMT clinics were interviewed at six-month follow up. Cox regression model was performed to identify factors predicting dropout in the MMT program.

Results: The cumulative probabilities of retention at 1, 3 and 6 months were 80.9%, 47.8% and 39.0%, respectively. The mean survival time was 3.5 months (SE=0.098) and median was 2.9 months. Seven factors were found to significantly predict retention in the MMT clinics. The seven factors were: female gender, in employment, good family relationships and support, currently married, never dropped out of MMT, subjective feeling of adequate dosage, and good provider-client relationship.

Conclusions: The retention rate of MMT is relatively low in the four MMT clinics due to the low quality of service. Non-treatment predicting predictors, such as employment status, family relationship and support, provider-client relationship, need to addressed and improved by improving the quality of comprehensive services.

Key words: Methadone Maintenance Treatment, Yunnan, China, retention, prospective cohort study, drug users, HIV/AIDS
Background: Vietnam has experienced a strong wave of migrants to urban and industrialized areas. This is a challenge for both local and national governments, which need to address the problems of the poor and socially marginalized, including providing housing for rural-to-urban migrants. Poor housing and the economic burden of house renting are increasingly recognized as determinants of both physical and mental health.

Objectives: This paper examined the impact of renting accommodation on income satisfaction and living conditions of female workers in light manufacturing industries in Vietnam.

Methods: A cross sectional study was implemented with a combination of a quantitative survey of 2818 female workers in 10 light manufacturing factories in 3 industrial zones by a self-administered questionnaire; 9 focus group discussions and 25 qualitative in-depth interviews with workers and other stakeholders.

Results: Over 38% of female workers had to rent accommodation of a low standard. The average expense for accommodation, water and electricity accounted for 30.1% of renters’ income, which is 7.2% (CI 95%, 5.3-9.3%) higher than for non-renters. A higher proportion of renters than non-renters considered their income was unstable and insufficient for living costs. In addition, only 7.2% of renters reported that their living conditions were suitable, notably lower than non-renters (22.4%).

Conclusion: The study showed the economic burden of house renting on workers’ income satisfaction and living conditions. The findings have implications for an adequate housing access strategy for workers including the integration of housing development in the planning and development of industrial zones and factories.

Keywords: House renting, Income satisfaction, Living conditions, Female workers, Light manufacturing industry

Meeting The Challenge Of The Sustainable Development Goals: A Research Partnership For Access To Services For People With Disabilities In Cambodia

Julie King1, Sarim Cheang2, Mark King1, Niki Edwards1, Anita Pearson1, Sophie Coelho1, Sakony Pen2
1Queensland University of Technology
2Handicap International Cambodia

Background: The 17 Sustainable Development Goals (SDGs) announced in 2015 include five goals which address the needs of people with disability in some way, mostly in relation to access and inclusion. Access to services such as rehabilitation and support are an important part of this, yet the transport and infrastructure system in countries like Cambodia presents barriers to access that governments find difficult to address. The aim of this research was to develop and trial a tool (the Journey Access Tool, or JAT) that could identify barriers on common trips taken by people with disability, such as visits to rehabilitation services, to provide information on the barriers that are most significant. The tool needed to be simple, adaptable, and designed to be used by people with disabilities and DPOs.

Methods: Three rounds of field testing with the JAT were conducted in Phnom Penh in February, May and September 2015. In each trial, two journeys were undertaken by people with different disabilities, accompanied by a trained assistant. Each journey involved a bus trip as well as travel through streets to reach bus stops and destination points, and some journeys were undertaken at night. In addition to using the JAT and cameras to record barriers they experienced, there was a full debriefing session and discussion after each set of journeys.

Results: The process evaluation raised issues of terminology and translation, complexity of items, length of the tool, and the role of the assistants when the perspectives of the people with disability were given priority. In terms of identification of barriers, the JAT proved to be useful and to stimulate an awareness of the perspectives of people with disability.

Conclusion: The JAT is a promising tool that can contribute to the achievement of the SDGs by using an inclusive approach to the identification of barriers to access. Its further use to negotiate with transport and road authorities and to advocate for change is currently underway and a great deal of interest has been shown.

Key Words: Disability; Access; Transport; Journey; Sustainable Development Goals
Advocacy and health at the crossroads: Enhancing mobility-related health needs using the Journey Access Tool (JAT)

Dr Julie King¹, Dr Mark King¹, Dr Niki Edwards¹, Sarim Cheang², Sophie Coelho², Anita Pearson²
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²Handicap International, Cambodia

An increasing number of people in Southeast Asia live with impairment-related disabilities that make it difficult for them to access health, human and other services. Mobility and access have strong implications for the health and wellbeing of populations but particularly those who are vulnerable are at increased risk. Exclusion can result in poor health outcomes and social isolation.

Unfortunately, the quality and characteristics of the built environment and the transport system produce many of the barriers experienced. Combined with negative attitudes around impairment and disability, there are powerful bio-psychosocial, spiritual, cultural and political forces at work that relegates people and their families to the margins of society. They often live in poverty and experience significant health challenges. This group have little voice and agency.

Collaboration between Queensland University of Technology, Australia and Handicap International Cambodia has developed and piloted a tool that people with disability and disabled peoples organisations (DPO) can use to identify barriers to mobility and access. The Journey Access Tool (JAT) is intended to provide information that can be used to advocate for high priority improvements to roads, footpaths, traffic conditions and public transport. Not only physical access needs to change but there needs to be changes to attitudes and views within broader society around people with disability.

The purpose of this workshop is to explore and describe the background and components of the JAT. In addition, results of the three pilot implementations of the tool that were conducted in Phnom Penh will be shared, including the voices of people with disability. Feedback from participants will be welcomed. Research will be shared that demonstrates the health impact of disability and the need for better access to a range of services.

We will invite delegates to share relevant observations around access, especially health advocacy that involves or leads to collaboration rather than oppositional relationships with agencies involved in policy development, implementation and decision making.

We are proud to make the JAT available after the conference to the broader community. For those delegates who are in Cambodia after the conference, we will be happy to invite them to events in Phnom Penh (Monday 7th) and Kampong Cham (Thursday 10th) which will combine demonstration of the use of the JAT, with media coverage.
Concurrent Meeting 3
Abstract of workshop by the Support to Public Health Institutes Programme

Joint learning for evidence-based policies

The Support to Public Health Institutes Programme (SPHIP) is a programme financed by the European Union to strengthen research for formulating health policies and for improving interaction between research institutes and policy makers. The SPHIP aims to create exchange platforms where experiences with remodelling of health systems can be shared and learned from.

In Asia institutes from Myanmar, Lao PDR and Bangladesh participate in the programme, with support from universities in Thailand, Vietnam and India.

In this session participants will discuss health systems research performed in Myanmar, Lao PDR and Bangladesh and other Asian countries, analysing policies and practices that are addressing the health needs of the countries. This session will focus on the experience in dialogue between policy makers and researchers. How can researchers contribute to the development and implementation of evidence-based policies? How do they realise knowledge translation, getting research into policy and practice? Which tools and instruments do they use to formulate a research agenda, jointly with policy makers? How do they present research outcomes and how do they formulate recommendations that are actionable, contributing to feasible health systems change.

The workshop will be highly interactive and will in organised as a round-table debate where participants discuss propositions brought up by representatives from SPHIP projects in Bangladesh, Myanmar and Lao PDR. All participants in the workshop will contribute to the debate, e.g. by electronic voting and feedback. The focus will be on mutual learning and establishing new networks.
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<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Positions and place of works</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assoc. Prof. Chhea Chhorvann</td>
<td>Director, National Institute of Public Health, Dean, School of Public Health, Cambodia</td>
</tr>
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<td>2</td>
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<td>Deputy Director, NIPH and Vice Dean School of Public Health, Cambodia</td>
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<tr>
<td>3</td>
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<td>Deputy Director, National Institute of Public Health (NIPH), Cambodia</td>
</tr>
<tr>
<td>4</td>
<td>Assist. Prof. Ir Por</td>
<td>Head of Technical Bureau, and Health System &amp; Policy Research, NIPH, Cambodia</td>
</tr>
<tr>
<td>5</td>
<td>Assist. Prof. Seng Sopheap</td>
<td>Vice Rector, University of Health Science (UHS), Cambodia</td>
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<td>6</td>
<td>Dr. Khim Keovathanak</td>
<td>Head, Department of Public Health, UHS Cambodia</td>
</tr>
<tr>
<td>7</td>
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<td>Associate Director, US- CDC, Cambodia</td>
</tr>
<tr>
<td>8</td>
<td>Assist Prof. Chan Sodara</td>
<td>Public Health Specialist, US-CDC, Cambodia</td>
</tr>
<tr>
<td>9</td>
<td>Assist. Prof. Var Chivorn</td>
<td>Executive Director, RHAC Cambodia</td>
</tr>
<tr>
<td>10</td>
<td>Dr. Chhim Sarath</td>
<td>Faculty of Medicine, University of Puthisastra, Cambodia</td>
</tr>
<tr>
<td>11</td>
<td>Dr. Yi Siyan</td>
<td>Director, KHANA Health and Population Research Center, Cambodia</td>
</tr>
<tr>
<td>12</td>
<td>Dr. An Yom</td>
<td>URC, Nutrition and NCD Program, Cambodia</td>
</tr>
<tr>
<td>13</td>
<td>Dr. Tol Bunkea</td>
<td>Head, Epidemiology Unit, National Center for Malaria and Parasitology, Cambodia</td>
</tr>
<tr>
<td>14</td>
<td>Assist. Prof. Sin Sovann</td>
<td>Deputy Director, National Center for Health Promotion, Cambodia</td>
</tr>
<tr>
<td>15</td>
<td>Assist. Prof. Koeut Pichenda</td>
<td>Deputy Director, National Center for Tuberculosis Control, Cambodia</td>
</tr>
<tr>
<td>16</td>
<td>Assist. Prof. Cui Haixia</td>
<td>Faculty member, School of Public Health and UHS, Cambodia</td>
</tr>
<tr>
<td>17</td>
<td>Dr. Bernd Appelt</td>
<td>Project Manager of Social Health Protection Project, GIZ Cambodia</td>
</tr>
<tr>
<td>18</td>
<td>Dr. Jacobs Bart</td>
<td>Senior Policy Advisor for Social Health Protection, GIZ Cambodia</td>
</tr>
<tr>
<td>19</td>
<td>Dr. Sieng Sokha</td>
<td>School Health Department, Ministry of Education, Youth and Sports, Cambodia</td>
</tr>
<tr>
<td>20</td>
<td>Dr. Kab Vannda</td>
<td>WHO Officer - Cambodia Office</td>
</tr>
<tr>
<td>21</td>
<td>Dr. Ngin Chanrith</td>
<td>KHANA Consultant, Cambodia</td>
</tr>
<tr>
<td>22</td>
<td>Dr. Ung Mengieng</td>
<td>Researcher, Health Geography, and Environmental Science, Canada</td>
</tr>
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<td>23</td>
<td>Prof. Sathirakorn Pongpanich</td>
<td>Dean, College of Public Health Sciences, Chulalongkorn University, Thailand</td>
</tr>
<tr>
<td>24</td>
<td>Assoc. Prof. Watasit Siriwong</td>
<td>Deputy Dean, College of Public Health Sciences, Chulalongkorn University, Thailand</td>
</tr>
<tr>
<td>25</td>
<td>Dr. Twisuk Punpeng</td>
<td>Thammasat University, Thailand</td>
</tr>
</tbody>
</table>
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The organizing Committee
Would like to thank the following organization for sponsoring this conference

Abstract Index
Authors

A
Ailian Bai 79
Alongkone Phengsavanh 250
Amonrat Merdthaisong 71
Anh Thi Thi Nguyen 178
Apichaya Jumpavong 182
Aye Liwin 199

B
Bai Hua 170
Bao Yen Luong Thanh 109, 230
Bawi Mang Lian 157
Benja Muktabhant 118

C
Chamnab Ngori 44
Chansathit Pink Taikeophithoun 219
Chatchawal Keerativorasakul 131
Chen Xi 176
Chen Ying 156

D
Dan Thi Linh Vo 81
Dawin Thol 187
Doan Duong 49
Duc Minh Duong 53, 120
Duc Nu Hong Vo 239
Duong Dinh Le 103

F
Fang Liu 215
Fang Xu 62

G
Gunjeong Lee 227

H
Hai Thi Kim Tran 147
He Li Mei 249
Haiying Win-Aye 110
Hoang Minh Nguyen 55, 192
Hoang Tu Le 153
Hong Qian Kong 208
Hong-Yan Liu 47
Hiro Munt Sw 80
Hung Manh Bui 205

J
Jaleerat Yodsanga 83
Jianshan Yao 126
Jiazhong Zhang 173
Jianhui He 153
Jing Fang 128
Jintana Srisoonmart 216
Jiruth Sriratanaban 26
Ji Lee 193

K
Karl Peltzer 105
Keobouphophone Keo Chindavong 148
Kesorn Thaewnong 143
Kittipong Bumpen 229
Kokasia Ko Nengmongvang 231
Krua Da 123
Krittachai Kaweechat Pachanon 225
Kyaung Htet Aung 140
Kyungock Yi 213, 214

L
Lan Gao 248
Le Cai 90
LiAN Dan 189
Lint Su Phung Huynh 84
Linxiong Wu 179, 201
Liping He 186
Li Yan 121
Loci Viet Ngo 177, 204

M
Malat Janakool 74
Ming Cion Tial 117
Man Hue Vo 152
Mei Zhou 92
Min Aung 77
Minh Hoang Nguyen 111
Mohammad Aligarh Ansari 91
Moe-Moe Kyi 56
Molina Choummanivong 146
Mont Khang-Lay 66

N
Nalapeet Poonskun 68
Nareerat Narongwattana 126
Natchareeya Kunyoung 65
Nay Chi Htet Htet Lin Aung 104
Nga Nguyen Thi 108
Nha Phan 243
Ngoc Bich Le 200
Nguyen Dao Thien An 244
Nguyen Trong Nhan 141
Nitchatorn Panomai 224

O
Oun Tasing 232
P
Paiwan Kana 240
Pannee Banchonhattachit 96
Patita Channongbol 165
Phoutsomphong Tuy Vilay 149
Phu Trieu Phan 142
Phyathida Kongpan 151
Porpimmon Pradit 59, 60
Prasert Khruatap 222
Prabhath Wijitha Kumara Pallewaththa 154

Q
Quanru Yang 67
Quyuan Guan 155
Quy Yan Zhu 40
Quanbo Zhou 41

R
Rattiy Onsuratoom 183
Rangwarun Wangchaing 174

S
Saiphirun Ngamsom 234
Samunya Mukarsa 233
San San Htaw 48, 116
Sawittrit Promkul 241, 242
Shengnan Xu 184
Siew Yap 181
Si Xi 171
Soe Win Paing 42
Sokunny Muth 97
Somvivat Vorlachak 180
Sonpavong Wang 93
Souvannan Say Songsavanh 145
Soulsamone Yod Thongmirey 85
Soe Chhin 46, 99
Sreyouchong Yong 14
Sriprom Kasakool 237
Stacey Pizzino 190
Sukanya Aoddoddo 58
Supaporn Tongprug 181
Suneer Kancham 125
Sun Sidorong 246
Supa Pengpipit 106
Suwalee Lowirakorn 216
Swe Le Mar 102

T
Tanunchar Boonmuk 115
Thamamontong Vasna 220
Thanawan Pichit 164
Thandar Khan 206
Thanh Nhan Phuc 58, 162, 163
Thai Tho Phuong Nguyen 199
Thapaphorn Saikos 73
Thien Kim Hong 188
Thi Minh Hong 230
Thuy Thi Thu Tran 127, 217, 212
Tiwakron Prachaiboon 86
Tuyen Dinh Hoang 122

U
Ubonrat Wiarat 228

V
Vansy Vansy Vilayvone 238
Vivian Lin 21

W
Warangkana Sungprasitwong 202
Werner Soors 23
Wipsana Khamrin 72
Wu Jie 43
Xiali Yang 218
Xiaomei Li 185
Xiao-Na Wang 169
Xia Xiao 70

Y
Ya-Min Thaung 203
Yang Xia Li 212
Yan Li 235
Yan Zhang 175
Yao Li 191
Ying Bai 160
Yingchun Dou 166
Ying Huang 150
Ying Li 251
Yongli Zhou 207
Younhee Kang 94
Yue-Qi Sun 50, 223
Yun Zhang 172
Yuri Kim 114
Yuzana Mon 52

Z
Zhang Ruobing 247
Zhou Hai 209
Zhou Hai 211
Zhu Feng Ming 245