



A·H·L·A
Asian Health Literacy Association



2019
NOV 10-12

7AHLA

Health Literacy In Smart Universal Healthcare
CONVENTION CENTER 272
272 Vo Thi Sau, District 3, HCM City



CONFERENCE BOOK

Website: www.7ahla2019.org - Email: 7ahla2019@gmail.com

7AHLA 2019

7th INTERNATIONAL HEALTH LITERACY CONFERENCE

NOV 10 – 12, 2019 / HO CHI MINH CITY, VIETNAM

AHLA Committee

- Prof. Peter WS Chang – President of AHLA
- Prof. Angela YM Leung – Vice-President
- Prof. Ma. Carmen C. Tolabing – Vice-President
- Dr. Tuyen V Duong – Vice-President
- Dr. Chi-Wei Lin – Secretary General

Conference President board

President

Dr. Nguyen Minh Quan
*Director of Thu Duc Hospital, HCM city,
Vietnam*

Vice President

Prof. Luu Ngoc Hoat
Hanoi Medical University, Vietnam
A.Prof. Vo Van Thang
*Hue University of Medicine and Pharmacy,
Vietnam*
Prof. Michael Dunne
QUT, Australia

Secretary

Nguyen Xuan Chi
Nguyen Vo Minh Hoang
Nguyen Thi Hong Thuy
Nguyen Thi Quy
Le Thi Thu Thuy

Scientific Committee

- Prof. Jurgen Pelikan,
*WHO-CC Health Promotion in Hospitals and Health Care
and University of Vienna, Austria.*
- Prof. Stephan Van den Broucke
University of Catholic Louvain, Belgium.
- Dr. Kristine Sørensen
Global Health Literacy Academy, Denmark.
- A.Prof. Angela Leung
The Hong Kong Polytechnic University, Hong Kong.
- Prof. Diane Levin-Zamir
University of Haifa, Israel.
- A.Prof. Natasha Khurshid
National Bulletin of Public Health, Bangladesh.
- Prof. Altyn Aringazina
Kazakhstan School of Public Health, Kazakhstan.
- A.Prof. Tin Tin Su
Monash University, Malaysia.
- A.Prof. Paras K Pokharel
BP Koirala Institute of Health Sciences, Nepal.
- Prof. Carmen C. Tolabing
University of the Philippines, Philippines.
- Prof. Hou Wen-Hsuan
Taipei Medical University, Taiwan.
- Prof. Peter WS Chang
Tufts University School of Medicine, USA.
- Prof. Tsai Ming-Che
Chung-Shan Medical University, Taiwan.
- A.Prof. Wongsu Laohasiriwong
Khon Kaen University, Thailand.
- A.Prof. Sabrina Kurtz-Rossi
Tufts University School of Medicine, USA.
- A.Prof. Pham Minh Khue
Haiphong University of Medicine and Pharmacy, Vietnam.
- A.Prof. Vo Van Thang
Hue University of Medicine and Pharmacy, Vietnam.
- Dr. Tuyen Van Duong
Taipei Medical University, Taiwan.

7AHLA 2019

7th INTERNATIONAL HEALTH LITERACY CONFERENCE
NOV 10 – 12, 2019 / HO CHI MINH CITY, VIETNAM



Welcome Address

It is with great pleasure to greet you, all distinguished guests, invited speakers and participants to the 7th AHLA Conference. Having the 7th annually held conference in Vietnam, it is indeed a pleasure and great honour for the Thu Duc hospital to host and organize such a prestigious event.

The 7th AHLA Conference will be held from 10th – 12th November 2019. This year's conference theme is "**Health Literacy in Smart Universal Healthcare**". We are expecting a congregation of 250 participants with over 100 coming from around the globe. This conference aims to bring together public health practitioners, policymakers, researchers, academics and students who are interested in the field of health literacy and population health to discuss and explore the national, global and international trends in health literacy today. We believe that through the unions of great minds that are gathered here in the conference, it will serve as a platform to share and learn how to address issues on health literacy.

Over the years, the Asian Health Literacy Association (AHLA) has been working ceaselessly to be an organization that helps expand communities' knowledge on health literacy. Through its' annually held conferences, new ideas and knowledge are shared between members of various countries.

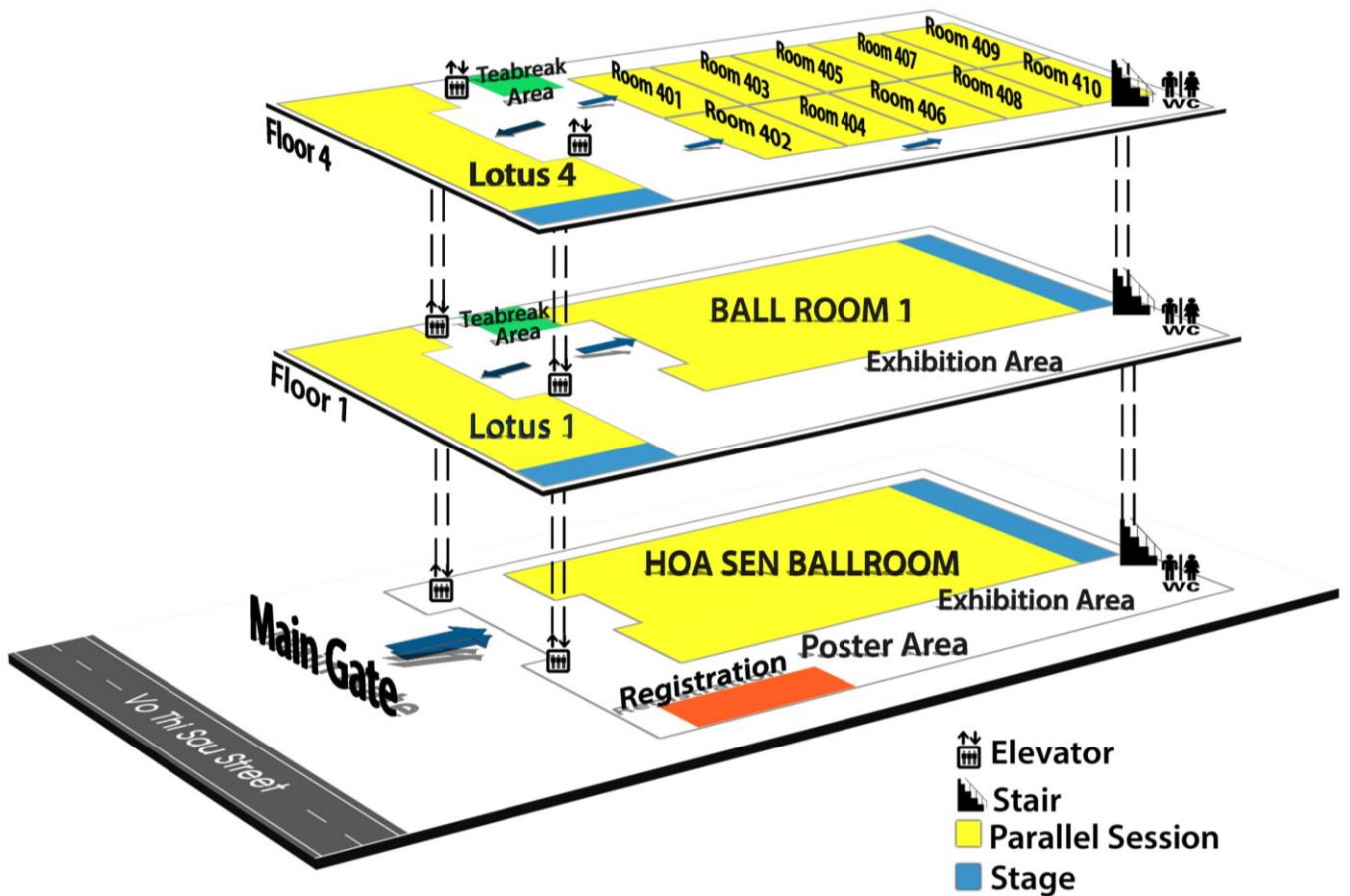
Let us once again come together to serve in bringing up issues on health literacy through sharing of ideas, experiences and educating one another. This will allow us to meet new challenges together and enable us to move forward towards better health for all. May the conference outcomes shape better practices in population health through health literacy and thus promising better health care in the future.

We thank you for your participation in this conference and are very pleased to have you here in Ho Chi Minh City, Vietnam. We wish all of you an enjoyable and meaningful conference.

Most sincerely,

Dr. Nguyen Minh Quan, MD, MPH
President of 7th AHLA conference
Director of Thu Duc hospital, Ho Chi Minh City, Vietnam.

Prof. Peter WS CHANG, MD, MPH, ScD (Harvard), FRCP (London)
President, Asian Health Literacy Association.



CONVENTION CENTER 272
272 Vo Thi Sau, Distric 3, HCM City, Vietnam

General Information

7AHLA Registration Desk. Desk is located in the ground floor of the 272 Conference Center Main Building. The opening times are as follows:

Sunday, November 10: 8:00 – 17:00

Monday, November 11: 08:30 – 12:00

Tuesday, November 12: 08:00–11:00

Registration fee. Your registration fee includes admittance to the complete conference program and all special programs.

The following social/food events are also included: Opening ceremony including reception on Monday evening, poster session on Monday evening and Tuesday morning, and two coffee breaks per day.

Badges required for conference sessions. 7AHLA badges must be worn at all sessions and events. Attendees without badges will be asked to go to the 7AHLA Registration Desk to register and pick up their badges. All participants, including speakers and session chairs, must register and pay the registration fee.

Conference dinner. The conference dinner on Monday evening is open to attendees and guests who registered and paid in advance for conference.

Info board. Changes at short notice and other important items will be displayed on an info board next to the 7AHLA Registration Desk.

Internet access. If your home institution participates in eduroam and you have an account, you can directly connect to the eduroam Wi-Fi. Otherwise, a guest account, for using the Wi-Fi network at the 272 Conference Center, is included in your conference materials. If you need help, please visit the helpdesk, which is located in the Ground floor of the Main Building.

Snacks and coffee breaks. Coffee, tea, and beverages are served during all breaks at the conference venue. Water and fruits will be available over the whole conference period.



Getting around by public transport. In order to identify yourself, you need to carry along your passport or national ID card. The “BUSMAP” app for Android and iOS will help you move inside the city.

Shopping. Most supermarkets are open from 07:00 to 22:00 in the city. The opening times of cafés, restaurants and small shops varies, but the vast majority should be accessible between 7:00 and 22:00. Note that most shops are closed on Sundays.

Since HCMC is a vibrant city, a variety of different kinds of shops can be found around the 272 Conference Center.

Emergency numbers. In case of an emergency keep the following important phone numbers in your mind.

Police: 113

Ambulance: 115

Fire brigade: 114

Questions and information. The organizers, staff of the registration desk, and student assistants will be identifiable by colored red name tags. Please contact them if you have any questions. Do not hesitate to enquire about all necessary information concerning the conference, orientation in HCMC, accommodations, restaurants, going out, and cultural events at the information desk which is located in the lobby of the Main Building.

Glance Program

PRE-CONFERENCE DAY: 10th November 2019 (SUNDAY)

	Room 404	Room 406	Room 408
9:00 – 12:00	Pre-conference workshop 1	Pre-conference workshop 2	Pre-conference workshop 3
	Health Literate Healthcare Organizations: application in research and practice	Health Literacy Policy and Advocacy	Digital Health Literacy, Health Literacy and Innovation in the Healthcare system
12:00 – 14:00	General Assembly Meeting (Room 403)		
14:00 – 17:00	City Tour		
17:00 – 20:00	Welcome dinner (Invited only)		

CONFERENCE DAY 1: 11th November 2019 (MONDAY)

8:00–17:00	Registration					
8:45–9:00	Opening Cultural Performances					
9:00–9:30	Opening remarks					
9:30–9:45	Award ceremony					
9:45–10:15	Group photo - Coffee break					
10:15–12:15	Plenary session					
12:15–13:30	LUNCH			Poster Presentations (P1-P44)		
13:30–15:15	Session 1	Session 2	Session 3	Session 4	Session 5 (I)	Session 6 (I)
	ROOM 404 Health literacy in media & communication	ROOM 406 Health literacy in aging care	ROOM 408 Health literacy in Asia	ROOM 410 Health literacy in NCDs	LOTUS 1 Carlo Urbani, SARS (2003), and Health Literacy	LOTUS 4 Health Literacy in Nursing Practice
15:15–15:45	Coffee Break			Poster Presentations (P45-P87)		
15:45–17:30	Session 7	Session 8	Session 9	Session 10	Session 5 (II)	Session 6 (II)
	ROOM 404 Health literacy in health services, delivery, outcomes	ROOM 406 Health literacy in maternal & child health	ROOM 408 Health Literacy in CIS Countries	ROOM 410 Health literacy and CRC	LOTUS 1 Carlo Urbani, SARS (2003), and Health Literacy	LOTUS 4 Health Literacy in Nursing Practice
18:00-20:00	GALA Dinner + Culture Night (Ground Floor)					

CONFERENCE DAY 2: 12th November 2019 (TUESDAY)

8:30–11:00	Registration			
8:00–10:45	Session 11	Session 12	Session 13	Session 14
	ROOM 404 Health Literacy in health promotion	ROOM 406 Integrated care in hospitals & publics	ROOM 408 Health literacy and translational research in MCH	LOTUS 4 Initiative on WHO M-POL and Beyond
10:45-11:00	Coffee Break			
11:00-12:00	IHLA Open Forum and 2020 Health Literacy Summit (LOTUS 4)			
12:00-12:30	Best Oral and Poster Awards Closing Ceremony Prof. Peter Chang; Dr. Nguyen Minh Quan			

Full Program

PRE-CONFERENCE DAY: 10th November 2019 (SUNDAY)

	Room 404	Room 406	Room 408
9:00 – 12:00	Pre-conference workshop 1	Pre-conference workshop 2	Pre-conference workshop 3
	Health Literate Healthcare Organizations: application in research and practice. Prof. Terence Ming-Che Tsai Prof. Sabrina Kurtz-Rossi	Health Literacy Policy and Advocacy. Prof. Stephen Van den Broucke Dr. Kristine Sorensen Prof. Paras K Pokharel	Digital Health Literacy, Health Literacy and Innovation in the Healthcare system. Prof. Diane Levin-Zamir Prof. Jurgen Pelikan
12:00 – 14:00	General Assembly Meeting (Room 403)		
14:00 – 17:00	City Tour		
17:00 – 20:00	Welcome dinner (Invited only)		

CONFERENCE-DAY 1: 11th November 2019 (MONDAY)

8:00–17:00	Registration	
8:45–9:00	Opening Cultural Performances	
	Dance with Vietnam palm-leaf conical hat - Dance with lullaby Au Lac	
9:00–9:30	Opening Remarks	
	A/Prof. Tran Thi Trung Chien Honorary President of 7 th HALA, former Minister of Health Prof. Nguyen Tan Binh Director of Department Health of Ho Chi Minh City Dr. Nguyen Minh Quan President, the 7 th AHLA Conference Prof. Peter Chang President, AHLA Dr. Kristine Sorensen President, International Health Literacy Association Dr. Stephan Van de Brouke Vice President, International Union for Health Promotion and Education Dr. Yuan-Kun Tu President, E-Dah Hospital (host of the 2020 Global Health Literacy Summit Conference) Director-General, Health Promotion Administration	
9:30-9:45	Award Ceremony	
	Global Health Literacy Awards AHLA Network Achievements Awards Yufong International Health Literacy Awards	
9:45–10:15	Group photo - Coffee break	
10:15–12:15	Plenary session (Main Conference Hall, 1F)	
	Moderators: Prof. Terence Ming – Che Tsai; Dr. Diane Levin - Zamir	
	Integration of Cancer Literacy in National Cancer Control Plans – a policy analysis. <i>Dr. Kristine Sørensen Global Health Literacy Academy, Denmark.</i>	
	Health literacy and screening in lung cancer – time to start implementation. <i>Dr. John Field Director of Research- The University of Liverpool, UK.</i>	
	Ultra-deep massive parallel sequencing for detecting and quantifying plasma circulating-tumor DNA: clinical utility and limitation. <i>Dr. Nguyen Hoai Nghia University of Medicine And Pharmacy, HCMC, Vietnam.</i>	
	An overview on results of health literacy studies of general population using HLS-EU instruments in Europe and beyond. <i>Prof. Jürgen Pelikan Austrian Public Health Institute & University of Vienna, Austria.</i>	
12:15–13:30	LUNCH	Poster Presentations (P1-P44)

>> Parallel Session <<

13:30–15:15	Session 1	Session 2	Session 3	Session 4	Session 5 (I)	Session 6 (I)
	ROOM 404 Health literacy in media & communication	ROOM 406 Health literacy in aging care	ROOM 408 Health literacy in Asia	ROOM 410 Health literacy in NCDs	LOTUS 1 Carlo Urbani, SARS (2003), and Health Literacy	LOTUS 4 Health Literacy in Nursing Practice
	Moderators: Prof. Carmen C. Tolabing Prof. Jürgen Pelikan	Moderators: Prof. Diane Levin-Zamir; Prof. Vo Van Thang	Moderators: Prof. Le Vu Anh; Dr. Kristine Sørensen	Moderators: Prof. Stephen Van den Broucke Prof. Nguyen Duc Chinh	Moderator: Dr. Min-Shi Lee; Dr. Nguyen Thanh Hung	Moderators: Prof. Terrence Tsai; Dr. Tran Quang Huy; Ms. Vuong Thi Nhat Le
	Keynote: When Health Literacy meets Innovation for reducing disparities in a universal healthcare system; from digital divide to digital development. <i>Diane Levin-Zamir University of Haifa and Clalit Health Services, Israel.</i>	Keynote: Workforce development to improve quality health and social care services for older adults in ASEAN countries. <i>Nakamura Keiko TMDU, Japan.</i>	Keynote: Health literacy, healthcare accessibility, utility, and health outcomes among people living in suburban, rural areas. <i>Tuyen Van Duong Taipei Medical University, Taiwan.</i>	Keynote: Advocating dementia literacy in society: The stakeholders involved and the actions needed. <i>Angela Y.M. Leung The Hong Kong Polytechnic University, Hong Kong.</i>	Keynote: Control and prevention of SARS in Vietnam. <i>Nguyen Van Kinh National Hospital for Tropical Diseases, Vietnam.</i>	Keynote: Effectiveness of training programmes on Nurses' wound care competencies after one-year implementation at Viet Duc University Hospital. <i>Phan Thị Dung Vietnam Surgical Nursing Branch, Vietnam.</i>
	Keynote: Improving Health Literacy through Media: An Initiative. <i>Natasha Khurshid National Bulletin of Public Health, Bangladesh.</i>	Keynote: How to Improve Health Literacy and Homecare for Elderly People in Vietnam <i>Luu Ngoc Hoat Hanoi Medical University, Vietnam.</i>	Keynote: Prevalence of limited health literacy in the Philippines. <i>Ma. Carmen C. Tolabing University of the Philippines.</i>	Health Literacy Intervention on Uncontrolled Hypertension Patients. <i>Sawitree Visanuyothin Maharat Nakhon Ratchasima Hospital, Thailand.</i>	Lessons learnt from SARS outbreaks and preparing for future epidemics. <i>Mei-Shang Ho Academia Sinica, Taipei, Taiwan.</i>	The Effectiveness of an education program for patients about Ostomy self-care. <i>Le Ngoc Tuyet University of Medicine and Pharmacy, HCMC, Vietnam.</i>
	Youtube channel as an opportunity to improve health literacy among patient through hospital television: The case of InaHealth TV. <i>Fatwa Sari Tetra Dewi, Universitas Gadjah Mada, Indonesia.</i>	Health Literacy and precondition of active ageing among Malaysian Public Employees. <i>Tin Tin Su Monash University, Malaysia.</i>	Comparing the accuracy and the composition between an Indonesia's Health Literacy Survey Questionnaire Sort Form (HLS-EU-SQ10-IDN) and the others short form. <i>Enny Rachmani Universitas Dian Nuswantoro, Indonesia.</i>	Knowledge, attitudes, practices on cervical cancer prevention and some related factors among women aged 18-60 in Thua Thien Hue province <i>Huy Tu Uyen Le Hue University of Medicine and Pharmacy, Vietnam.</i>	Prevention and Control of Emerging Infectious Diseases in Vietnam. <i>Le Van Tan Oxford University Clinical Research Unit, Vietnam</i>	Adherence of treatment and Quality of life of Gouty patients in Rheumatology department at E Hospital 2019 <i>Nguyen Thi Thao E Hospital, Vietnam.</i>
	Media Literacy and Smoking Prevention on Children. <i>Nurjanah Universitas Gadjah Mada, Indonesia.</i>	The relationship between health literacy and self-management behaviors in older adults with hypertension <i>Tran Van Tot Thu Duc Hospital, Vietnam.</i>	Validating the HLS-EU-Q47 for the Indian context. <i>Jyoshma Dsouza Université catholique de Louvain, Belgium.</i>	Protocol on health literacy for management and control of hypertension: a participatory action intervention in a village of Chandigarh, India <i>Reetu Passi Post Graduate Institution of Medical Education and Research, India.</i>	Panel Discussion	Factors related to quality of life of patients with advanced cancer. <i>Diep Thi Tieu Mai Da Nang Oncology Hospital, Vietnam.</i>

13:30–15:15	Session 1	Session 2	Session 3	Session 4	Session 5 (I)	Session 6 (I)
	ROOM 404 Health literacy in media & communication	ROOM 406 Health literacy in aging care	ROOM 408 Health literacy in Asia	ROOM 410 Health literacy in NCDs	LOTUS 1 Carlo Urbani, SARS (2003), and Health Literacy	LOTUS 4 Health Literacy in Nursing Practice
	Effect of the health behavior development program by applying media health literacy skill to prevent type 2 diabetes mellitus among at-risk population at Pan Charoen sub-district health promoting hospital, Wanon Niwat district, Sakon Nakhon province. <i>Saksit Khamkor Khon Kaen University, Thailand.</i>	Stroke prevention in non-valvular atrial fibrillation patients: choosing the right OACs for right patients? <i>Nguyen Van Tri, President of Geriatric Association of Ho Chi Minh City.</i>	Health Literacy on Influenza and Influenza Vaccination among High Risk Groups in Thailand. <i>Pahurat Kongmung Ministry of Public Health, Thailand.</i>	The 14-item health literacy scale for diabetes: Translation and preliminary validation study of the Vietnamese version. <i>Vo Tuan Khoa Department of Endocrinology Hospital 115, Vietnam.</i>		Quality of life and related Factors on patients with deep venous thrombosis. <i>Nguyen Thi thanh Truc University Medical Center, HCMC, Vietnam.</i>
	Association between internet using and health information seeking behavior among adults in the central region of Vietnam. <i>Quynh Anh Nguyen Dac Hue University of Medicine and Pharmacy, Vietnam.</i>	A social epidemiological perspective to the relationship between health literacy and oral health of older persons in Ghana. <i>Padmore Adusei Amoah Centre for Social Policy and Social Change, Ghana.</i>	E-Health Literacy of Medical Students at a University in Central Vietnam. <i>Thuy Le Thi Bich Hue University of Medicine and Pharmacy, Hue, Vietnam.</i>	Effects of Health Literacy Program with Social Media for Obesity Prevention Among Overweight Personnel in Health Promoting Center. <i>Atchara Namuang Graduate School, Khon Kean University, Thailand.</i>		Assessment the wound care of nurses in Intensive Care Unit and some Surgical Department of E Hospital, 2016. <i>Do Thi Ngoc E Hospital, Vietnam.</i>
	Reliability and validity of the internet gaming disorder-20 test among Vietnamese teenager. <i>Thu Uyen Hoang Hanoi Medical University, Vietnam.</i>	Association of nutritional supplements usage and information sources with gestational diabetes mellitus among pregnant women. <i>Nguyen Hoang Minh Haiphong University of Medicine and Pharmacy, Vietnam.</i>	Health literacy and associated factors among inpatients in Lien Chieu District medical center, Danang, Vietnam. <i>Linh Huynh Ba Phuong Lien Chieu District medical center, Vietnam.</i>	Endoscopic Removal of Upper GI Foreign Body <i>Dr. Dang Vu Ngoc Giang Thu Duc District hospital</i>		Nutritional status of preoperative cardiovascular patients at Viet Duc hospital in 2018. <i>Trinh Thi Thanh Binh Viet Duc University Hospital, Vietnam.</i>
	Relationship between health information seeking sources and eHealth literacy among adults in China. <i>May O. Lwin Wee Kim Wee School of Communication and Information, Singapore.</i>	TAMSULOSIN OCAS (HARNAL OCAS) Lower urinary tract symptoms/ Benign Prostatic Obstruction (LUTS/BPO) <i>Nam Dang Medical Advisor – Astellas Pharma</i>	Comprehensive healthcare solutions <i>Phar. Nguyen Thi Hanh Thu Abbott laboratories Pte. Ltd</i>	Fresenius Kabi caring for life <i>My Tran Product Manager</i>	The journey of changing diabetes in Vietnam <i>Hoang Thi Xuan Thanh Product Manager – New generation insulins Novo Nordisk A/S Vietnam</i>	Effective respiratory support group at Cho Ray hospital. <i>Dang Hoang Vu Cho Ray Hospital, Vietnam.</i>
15:15–15:45	Coffee Break			Poster Presentations (P45-P87)		

15:45–17:30	Session 7	Session 8	Session 9	Session 10	Session 5 (II)	Session 6 (II)
	ROOM 404 Health literacy in health services, delivery, outcomes	ROOM 406 Health literacy in maternal & child health	ROOM 408 Health Literacy in CIS Countries	ROOM 410 Health Literacy and CRC	LOTUS 1 Carlo Urbani, SARS (2003), and Health Literacy	LOTUS 4 Health Literacy in Nursing Practice
	Moderators: Prof. Sabrina Kurtz-Rossi; Dr. Kristine Sørensen	Moderators: Prof. Michael P Dunne; Prof. Vo Van Thang	Moderators: Prof. Natasha Khurshid; Prof. Jürgen Pelikan	Moderators: Prof. Terrence Tsai Prof. Tran Quoc Kham Prof. Luu Ngoc Hoat	Moderator: Dr. Le Van Tan; Dr. Wen- Chiung Chang	Moderators: Prof. Angela Y.M. Leung; Dr. Tuyen Van Duong; Dr. Phan Thi Dung
	Keynote: Global health literacy plans and actions by the governments. <i>Peter WS Chang Tufts University Medical School of Medicine, USA.</i>	Keynote: International research to improve maternal and child health literacy: The Evidence for Better Lives Study. <i>Manuel Eisner University of Cambridge, UK.</i>	Keynote: The Psychology of Health Literacy. <i>Stephan Van den Broucke Université catholique de Louvain, Belgium.</i>	Keynote: Precision medicine in population-based colorectal cancer screening. <i>Hsiu-Hsi Chen National Taiwan University, Taiwan.</i>	Keynote: Updates on Asia-Pacific Network for Enterovirus Surveillance (APNES). <i>Min-Shi Lee APNES, Taiwan.</i>	Keynote: Team Based Care: A selected work model to satisfy effective patient centered care. <i>Tran Quang Huy Vietnamese Nursing Association, Vietnam.</i>
	Keynote: Health Literacy and Universal Health Care. <i>Paras K Pokharel B P Koirala Institute of Health Sciences, Nepal.</i>	Understanding the health and social service needs of pregnant women in Vietnam: A method to compare the perceptions of health professionals and new mothers. <i>Huyen Phuc Do Queensland University of Technology, Australia.</i>	Keynote: The place of parental nutrition literacy in prevention of NCDs. <i>Altyn Aringazina Kazakhstan School of Public Health, Medical University, Almaty, Kazakhstan.</i>	Taiwan Colorectal Cancer Screening Program. <i>Sam Li-Sheng Chen Taipei Medical University, Taiwan.</i>	Multi-Target Zika Virus Pathogenesis. <i>Elisa Vicenzi San Raffaele Scientific Institute, Italy.</i>	Knowledge and self-mobility behaviors to prevent deep vein thrombosis in patients with femoral neck fracture. <i>Le Thi Cam Thu University of Medicine and Pharmacy, HCMC, Vietnam.</i>
	Nurses' Knowledge of and Experience with Health Literacy in Clinical Practice: A Meta-Ethnography. <i>Adwoa O. Koduah The Hong Kong Polytechnic University, Hong Kong.</i>	The effect of health literacy and social support development program on pregnant behavioral prevention for early adolescent. <i>Peerapol Chaiyachai Khon Kaen University, Thailand.</i>	CIS countries group initiative within the WHO European Action Network on Health Literacy for Implementation of Prevention and Control of NCDs. <i>Maria Lopatina Ministry of Health of the Russian Federation, Russia.</i>	A population-based randomized controlled trial for colorectal cancer screening in Khon Kaen, Thailand: Implementation and current situation. <i>Pongdech Sarakarn Khon Kaen University, Thailand.</i>	Prevention and control of dengue fever in Vietnam. <i>Luong Chan Quang, Pasteur Institute in Ho Chi Minh City, Vietnam.</i>	Factors related innovation behavior among nurses in general hospital in central of Vietnam. <i>Le Van Tung Khanh Hoa Provincial Department of Health, Vietnam.</i>
	The Role of Health Literacy in Predicting Patient-provider Communication in Beijing Secondary Students <i>Shuaijun(Jun) Guo Royal Children's Hospital, Australia.</i>	Diversity in using the internet to find health information among mothers with children under five years old at Vietnam National Children's hospital in 2019 <i>Thai Son Dinh Hanoi Medical University, Vietnam.</i>	Health literacy among former Soviet Union immigrants. <i>Uliana Kostareva University of Hawai'i at Mānoa, USA.</i>	Disease Burden and Screening Policy for CRC in Vietnam. <i>Le Dinh Duong Hue University of Medicine and Pharmacy, Vietnam.</i>	Panel discussion: <i>William Harn, TUF, Taiwan. Min-Shi Lee, APNES, Taiwan.</i>	A survey on the Knowledge and Attitudes of medical staff toward medical incidents reporting in Quang Ninh Obstetrics & Pediatrics Hospital in 2018. <i>Le Thi Thuy Trang Quang Ninh Obstetrics and Pediatrics Hospital, Vietnam.</i>

15:45–17:30	Session 7	Session 8	Session 9	Session 10	Session 5 (II)	Session 6 (II)
	ROOM 404 Health literacy in health services, delivery, outcomes	ROOM 406 Health literacy in maternal & child health	ROOM 408 Health Literacy in CIS Countries	ROOM 410 Health Literacy and CRC	LOTUS 1 Carlo Urbani, SARS (2003), and Health Literacy	LOTUS 4 Health Literacy in Nursing Practice
	Strengthening the prevention of occupational diseases at surgical hospital through survey in Viet Duc hospitals for ergonomic. <i>Luong Mai Anh Ministry of Health, Vietnam.</i>	Pregnancy health literacy among teenagers in Kaysone district, Savannakhet province, Lao PDR. <i>Phonevilai Santisouk University of Health Sciences, Laos.</i>	The issues regarding early rehabilitation of children with Down Syndrome. <i>Armida Yelekenova Medical University, Kazakhstan.</i>	Laparoscopic surgery for colorectal cancer in Thu Duc District Hospital: 2016-2019 result <i>Chu Minh Tuan Thu Duc district hospital</i>		Assessment the Knowledge, Attitude and Practice on Ostomates at hospital in Southern Vietnam. <i>Vo Thi Thanh Tuyen University Medical Center, HCMC, Vietnam.</i>
	A school-based nutritional program on the management of childhood obesity. <i>Hsiang Ju Pan Kaohsiung Veterans General Hospital, Taiwan.</i>	The effectiveness of health education program with utilizing line application for enhancing health literacy in motorcyclist accident prevention among non-formal education adolescents. <i>Nattawat Panyasai Khon Kaen University, Thailand.</i>	Ethnic differences of hypercholesterolemia prevalence and awareness among rural residents of two countries: Russia and Kyrgyz Republi. <i>Kontsevaya Anna Ministry of Health of the Russian Federation, Russia.</i>	Giới thiệu sản phẩm công ty Novartis		A study of management competency on chief nurses <i>Truong Hoai Nam Kien Giang General Hospital, Vietnam.</i>
						Assessing Symptom distress among patients with Bronchopulmonary cancer treated at Thai Nguyen Oncology Center <i>Nguyen Duc Thanh Thai Nguyen National Hospital, Vietnam</i>
						Nurses' working engament at general hospital of Agriculture. <i>Le Thi Trang Danang University of Medical Technology and Pharmacy, Vietnam.</i>
18:00-20:00	GALA Dinner + Culture Night (Ground Floor)					

CONFERENCE-DAY 2: 12th November 2019 (TUESDAY)

8:30–11:00

Registration

8:00–10:45	Session 11 ROOM 404 Health Literacy in health promotion	Session 12 ROOM 406 Integrated care in hospitals & publics	Session 13 ROOM 408 Health Literacy and Translational Research in MCH	Session 14 LOTUS 4 Initiative on WHO M-POL and Beyond
	Moderators: Prof. Nguyen Thanh Hiep Prof. Tin Tin Su	Moderators: Prof. Hazreen Abdul Majid Prof. Luu Ngoc Hoat	Moderators: Prof. Manuel Eisner; Prof. Vo Van Thang	Moderators: Prof. Peter WS Chang Prof. Carmen C. Tolabing
	Keynote: National Health Literacy Action Plan Development in Taiwan. <i>Ying-Wei Wang Health Promotion Administration, Ministry of Health and Welfare, Taiwan.</i>	Keynote: Rolling out the CARPET: To Equip Primary Healthcare Professionals for Patient Engagement. <i>Predeebha K. National Healthcare Group Polyclinics, Singapore.</i>	Keynote: Transforming doctoral research into practical resources to improve health literacy of maternal and child health workers in Vietnam. <i>Michael P Dunne, Queensland University of Technology, Australia.</i>	An overview on aims, structure and procedures of M-POHL. <i>Christina Dietscher Austrian Ministry of Health, Austria.</i>
	Keynote: Promoting Health Equity at the Intersection of Health Literacy, Culture and Language. <i>Sabrina Kurtz-Rossi Department of Public Health and Community Medicine, Tufts University, USA.</i>	Health literacy for early dementia diagnosis. <i>Sheng-Pin Chang Lai Landseed International Hospital, Taiwan.</i>	Association health literacy influencing awareness of autism spectrum disorder (ASD) early screening of mothers with children under 3 years old in Viet Nam <i>Trinh Thi Mai Le Hanoi University of Public Health, Vietnam.</i>	- An overview on aims, research questions, design and instruments of HLS19. - HLS19 for Austria. <i>Jürgen Pelikan Austrian Public Health Institute & University of Vienna, Austria.</i>
	Effects of Mental Health Literacy Promotion Program with Positive Psychology Concepts for Promoting Stress Management Behavior among Village Health Volunteers. <i>Watcharin sauhem Khon Kaen University, Thailand.</i>	Associated factors of hypertension in a general Vietnamese population and potential roles of health literacy. <i>Tran Quoc Cuong Thu Duc Hospital, Vietnam.</i>	Health literacy of parents with autistic spectrum disorder children in Hanoi in 2018: A cross-sectional study and a quantitative study. <i>Nguyen Ngoc Khanh Ha Noi Medical University, Vietnam.</i>	- Research questions and instrument for measuring digital health literacy (DHL) within HLS19. - HLS19 for Israel. <i>Diane Levin-Zamir University of Haifa and Clalit Health Services, Israel.</i>
	Effects of oral health literacy program on promoting oral health behaviors and oral health status among Thai adults with type 2 diabetes mellitus. <i>Supasin Deeraksa Khon Kaen University, Thailand.</i>	Health Literacy of Patients Attending Cardiac Rehabilitation. <i>Alison Beauchamp Australian Centre for Heart Health, Australia.</i>	Autistic in Hanoi, Vietnam: knowledge about early detection autistic among teachers of preschool schools. <i>Duy Nguyen Cao Hanoi Medical University, Viet Nam.</i>	HLS19 for Kasachstan <i>Altyn Aringazina Kazakhstan School of Public Health, Medical University, Almaty, Kazakhstan.</i>
	The effects of health literacy and motivation application program on alcohol drinking behavioral reduction of male adolescents. <i>Apinya Ratsrimuang Khon Kaen University, Thailand.</i>	An initial assessment of awareness and participation of doctors and nurses with patients on Health promotion activities at E hospital, Vietnam.. <i>Do Thi Ngoc E Hospital, Vietnam.</i>	Current situation on the prenatal health care utilization among new mothers in the mountainous district. <i>Tran Dinh Trung Danang University of Medical Technology and Pharmacy, Vietnam.</i>	HLS19 for Denmark <i>Kristine Sørensen Global Health Literacy Academy, Denmark.</i>

8:00–10:45	Session 11	Session 12	Session 13	Session 14
	ROOM 404 Health Literacy in health promotion	ROOM 406 Integrated care in hospitals & publics	ROOM 408 Health Literacy and Translational Research in MCH	LOTUS 4 Initiative on WHO M-POL and Beyond
	Health Literacy on Food Consumption among School Adolescent in Vientiane Capital. <i>Somphone Dalavong University of Health Science, Laos.</i>	Outcomes at the Neonatal Intensive Care Unit, Eastern Regional Referral Hospital, Monggar Bhutan: A Retrospective Cohort Study. <i>Hari Prasad Pokhrel Gidakom Hospital, Ministry of Health, Bhutan.</i>	Effects of Health literacy and Self-Efficacy Program for Premature Pregnancy Prevention among Thai Female Adolescents. <i>Paneee Banchonhattakit Khon Kaen University, Thailand.</i>	HLS19 for Belgium <i>Stephan van den Broucke University of Catholic Louvain, Belgium.</i>
	The relationship between health literacy and preventive behavior of coronary artery disease among people in Tanod Subdistrict, Non Sung District, Nakhon Ratchasima Province <i>Tanida Phatisena Nakhon Ratchasima Rajabhat University, Thailand.</i>	How critical health literacy and self - sufficiency economy theory contribute to community development? <i>Kesinee Saranrittichai Khon Kaen University, Thailand.</i>		
	Health Information seeking behavior and related factors among adults in Hue city, Vietnam. <i>Quynh Anh Nguyen Dac Hue College of Medicine and Pharmacy, Hue University, Vietnam.</i>			
10:45-11:00	Coffee Break			
11:00-12:00	LOTUS 4 IHLA Open Forum and 2020 Health Literacy Summit			
12:00-12:30	LOTUS 4 Best Oral and Poster Awards Closing Ceremony Prof. Peter Chang; Dr. Nguyen Minh Quan			

Poster Session

	Presenter	Content
P1.	Yupawadee Chaekulchat	Increasing Satisfaction on Quality Management at a Dental Public Health School
P2.	Paul Bass	Health Literacy on the Predictors for Serious Traumatic Brain Injury from Physical Violence Among African Men in The Gambia
P3.	Rattagan Yanaso	Satisfaction in TB care services at a primary care unit in Bangkok, Thailand
P4.	Nguyen Minh Tu	What is level of physical activity among secondary school students in Vietnam?
P5.	Huang, W. Y.	Effects of virtual reality on balance control in older adults
P6.	Sauhem W, Student	Effects of Mental Health Literacy Promotion Program with Positive Psychology Concepts for Promoting Stress Management Behavior among Village Health Volunteers
P7.	Monica Trifitriana	The Differences Effectiveness of Health Promotion Through Audiovisual Media and Lecture Methods on the Level of Knowledge of Elementary School Children About TB Disease
P8.	Afifa Jasmon	Parental Influences on Medical Students' Self-Efficacy and Career Exploration in Collectivist Culture
P9.	Azzahra Shinta Intansari	The Relationships of Self Efficacy, Outcome Expectation, Career Intention and Career Exploration in Nursing Student's Career Choice
P10.	Fidyah Pratiwi	Relationship between Career Self Efficacy, Career Outcome Expectation, Career Intention and Career Exploration in Career Selection Nutrition Science Student
P11.	Fianirazha Primesa Caesarani	Modeling of Career Choice Behaviors in Indonesian Dentistry Students
P12.	Wan-Yun Huang	The effects of integrated outpatient services for people with disabilities on health literacy
P13.	Rao, Arathi	Development of a Health Literacy Toolbox for India
P14.	Mai P. Nguyen	Sleep quality literacy in cancer patients and its related factors
P15.	Karl Peltzer	High carbonated soft drink consumption is associated with externalizing and internalizing behaviour among in-school adolescents in six Southeast Asian countries
P16.	Luu Ngoc Minh	Health literacy among mothers of children under 3-year: A latent class analysis
P17.	Pham Hai Thanh	Association of health literacy of mothers with their decision on screening for autism spectrum disorder (ASD) in children aged under 3 years old in Vietnam
P18.	Duong Quoc Thao	Proportion and factors associated with hyperuricemia of people over 40 years old in Quang Nam Province
P19.	Okti Ratna Mafruhah	Identify quality assessment tools for medication literacy measures
P20.	Daniyar Ainakulov	Health literacy in secondary prevention of cardiovascular diseases
P21.	Ryan C. Guinanan	Positioning Our Purpose: Communicating Health Through 'NutriSkwela' Community Radio in Ifugao, Philippines
P22.	Nguyen Thi Bich Tuyen	Integrating behavioral activation technique in cognitive-behavioral therapy treatment for anxiety disorders in Viet Nam
P23.	Anthony T.NG	Implications of Indeterminacy between Requests (for action) and References (of information) for Public Health Communication and Critical Health Literacy
P24.	Yoslien Sopamena	Measuring health literacy among first year college students of Universitas Pattimura
P25.	Yulita Sirinti Pongtambing	Using Cognitive Interviews to Adapt Health Literacy Scale Instrument for First Year College Students of Four Public Universities in Indonesia
P26.	Xiao Yu Zhuang	Evaluating the effectiveness of the Mental Health First Aid training among Chinese-speaking tertiary international students in Melbourne
P27.	Myo Minn Oo	Tuberculosis literacy and completion of household contact investigations: A household based survey from Southern Thailand
P28.	Vallerut Pobkeeree	Communicating Health Risks of Influenza Vaccine to the Elderly
P29.	Ha TTT	Health status and the need to use the health services of the elderly at some elderly Hai Phong clubs in 2018.
P30.	Hoang Yen Nhi	Health literacy and some factors related to the breakfast practice of third year Medical students in Hanoi 2018-2019
P31.	Jerico H. Bajador	Development and Pilot-testing of a Schizophrenia Literacy Questionnaire for Caregivers of Patients with Schizophrenia at the National Center for Mental Health
P32.	S. Dulamsuren	Patient Literacy in Cardiovascular Diseases Prevention to maintain lifestyle changes
P33.	Chatchawan Phetkong	Health Literacy among Leader of Elderly Social Club at Regional Health Promotion Center 5 Ratchaburi, Thailand
P34.	Bhumika Desai	Information Needs of Oral Cancer Patients in India: A Qualitative Study Protocol
P35.	Ian Dixon	Ashes and Sighs: Formulating and Distributing Palliative Care in Cinema
P36.	Thang Nguyen Huu	Validation and reliable of the active aging scale for Vietnamese elderly adults.
P37.	Phan Thanh Phuc	Health Promoting Hospital: Evidenced from a University Medical Center

	Presenter	Content
P38.	Palanisamy Sivanandy	A nationwide study on retail pharmacists knowledge, attitude and perception towards patient safety in Malaysia
P39.	Ying-Hsuan Chen	Exploring the relationship of eHealth Literacy, Perceived Credibility of Health Information Sources and Internet Fake-Checking
P40.	Mei-Chuan Chang	Integration of Synchronous Distance Learning and Team Based Learning to Provide Community Health Professionals with Health Literacy Training
P41.	Gaukhar Kayupova	Student's health literacy level according to university type (preliminary results of the ongoing research in Karaganda, Kazakhstan)
P42.	Bernadette Bartlam	Novel approaches to capturing household dimensions of health literacy
P43.	Nguyen Minh Tu	Association between physical activity and depression, anxiety, stress among students at hue university of medicine and pharmacy in 2018
P44.	Le Xuan Hung	Health literacy and some related factors to the preservation of food in the refrigerator of housewife in Hanoi in 2018
P45.	Van Sang Phan	Effectiveness of Pictorial cigarette warning labels on smoking quit intention: Results from Global Adult Tobacco Survey (GATS) 2015
P46.	Van Sang Phan	Knowledge, Attitude, and Practice about Hepatitis B Disease and Demands of Patients Infected with Hepatitis B Virus in the Hue University of Medicine and Pharmacy Hospital
P47.	Nguyen Thi Khanh Ly	Knowledge, attitude, practice on sexuality education of parents have children in teenager in Thuy Van, Huong Thuy, Thua Thien Hue province 2019.
P48.	Katawut Suramanka	The Effectiveness of Stages of Change Model and Social Support Application Program on Adolescent Smoking Cessation, Thailand.
P49.	Reetu Passi	Reliability and confirmatory factor analysis of Health Literacy Questionnaire- Asia (HLQ Asia): a cross sectional survey among Indian adults
P50.	Nguyen Thi Anh Ngoc	Knowledge, attitude, practices of nurses and the relative factors on prevention of Hepatitis B
P51.	Nguyen Xuan Dung	Health capacity and related elements on outpatients ≥ 40 years at Thu Duc district hospital in 2017
P52.	Le Tran Tuan Anh	Knowledge, attitudes and practice about managements of blood pressure of hypertensive patients in Hai Phong Medical University Hospital
P53.	Nguyen Minh Tu	Internet addiction and related factors among medical students
P54.	Nguyen Thi Anh Chi	Knowledge and Practice on Food Safety Among Housepersons in Hue City, In 2017
P55.	Nguyen Phuc Thanh Nhan	Occupational noise exposure in relation to hypertension: a cross-sectional study in fishermen
P56.	A.M. Aringazina	Medical literacy of handicapped cancer patients
P57.	Chia Min, Chiu	A Study of the Correlation among Resilience, Over-commitment, and Sleep Quality with Different Levels of Hospital employees
P58.	Masayuki Soma	One-year predictors of decline in instrumental activities of daily living function among community-living elderly adults
P59.	Nguyen Thi Thin	Postpartum depressive symptoms and associated factors among married women in a city, central coast, Vietnam
P60.	Karthikayini Krishnasamy	Implementation of the comprehensive unit based safety program (cusp) in a tertiary care hospital
P61.	Mary Luz C. Fiangaan	Views and use of generic medicines in Baguio City, Philippines: A cross-sectional study with physicians
P62.	Sri Andarini Indreswari	Factors associated with hypertension literacy in punggelan health center I Banjarnegara District Central Java Indonesia
P63.	Sri Handayani	Attitude Towards Contraceptive among Indonesian Students
P64.	Ourlad Alzeus G. Tantengco	Using Facebook Page Insights to Analyze User Engagement in a Facebook Page for Public Health Education
P65.	Thi Vinh Nguyen	Global burden of disease-wise and geographic distribution of health literacy studies
P66.	Cheng-Yu Chen	Construct a Smoking Cessation Program for the Patients in Hospitals
P67.	Trinh Thanh Xuan	Depressive disorder and some related factors among students at Quoc Tuan High School, An Lao District, Hai Phong in 2018
P68.	Vanesy Manivone	Factors Associated With Satisfaction Among Patients Achieving Out Patient Department (OPD) Service In Kham District Hospital, Xiengkhouang Province, Lao PDR
P69.	Tsai, Hsiu We	Health literacy and esophgeal cancer nutrition: A Case Report.
P70.	Napintorn Sirithai	Health Literacy and Self-Care of diabetic patients in Nonthaburi, Thailand
P71.	Piyaporn Wangroongsarb	Health Literacy on Dengue Prevention and Control through Social Media in Thailand
P72.	Nguyen Duc Chinh	Related traffic accident victims due to alcohol abusetreated in Viet Duc University Hospital

	Presenter	Content
P73.	Aung Than Oo	Analysis on ASEAN capacity lead to Universal Health Coverage by 2030
P74.	Luong Thanh Bao Yen	Factors associated with intimate partner violence and depression among pregnant women in central Vietnam: A rising concern for mental health literacy in Asia
P75.	Tran Minh Thai	Evaluating the reliability and the value of questionnaire assessing patient satisfaction in the satellite politics at Binh Chieu ward medical station, Thu Duc district, in Ho Chi Minh City
P76.	Hoang Dinh Tuyen	Intimate partner violence against pregnant women: A birth cohort study for evidence-based health literacy promotion in Vietnam
P77.	Vo Van Thang	Functional status and related factors among the elderly in the central province, Vietnam: a further consideration of health literacy for healthy aging
P78.	Nguyen Hoang Thuy Linh	Cyber-bullying among young adolescent: evidence from school-based survey in Central Vietnam to address health literacy in violence prevention at schools
P79.	Le Thi Bich Thuy	E-health literacy of medical students at a university in central Vietnam
P80.	Dang Thi Anh Thu	Effects of extreme temperature on hospital admissions for acute myocardial infarction in Thua Thien Hue province of central Vietnam: a big concern of health literacy promotion
P81.	Le Dinh Duong	Maternal health care service utilization among ethnic minority women in central of Vietnam: How to improve Maternal Health literacy
P82.	Bui Thi Phuong Anh	Epidemiology of venomous snakebites and knowledge, attitude and practices of first-aid for snakebites in the central province, Vietnam
P83.	Ngo Viet Loc	The situation of using safe motherhood services of the mothers with children under 1 year old in a rural district, Vietnam
P84.	Ruyi Huang	Applied the prototype of artificial intelligence on holistic weight management– the influence of health literacy on obesity
P85.	Nguyen Thi Hong Nhi	Quality of life and associated factors among the elderly in a city Vietnam
P86.	Tran Thi Tao	Assessing nutritional status of the elderly in a rural district, Vietnam: Health literacy for healthy aging
P87.	Nguyen Thi Bao Ai	Chronic disease status and the demand for care among the elderly in a city, central Vietnam
P88.	Dang Cao Khoa	Quality of life of chronic patients with end-stage kidney disease undergoing cycling haemodialysis at Quang Ngai Provincial General Hospital
P89	Vinh Thi Nguyen	Women with physical disabilities in Northern Vietnam: Breastfeeding challenges and adaptation
P90	Torsten Michael Bollweg	Measuring self-reported health literacy among German children aged 9 to 10 using the HLS-Child-Q15-DE
P91	Cao Minh Chu	Hospital quality and results of evidence based intervention model in Can Tho city

KEYNOTE SPEAKER



PETER WS CHANG, MD, MOH, SCD, FRCP

Received his medical doctorate from National Yang Ming University Medical College in Taiwan in 1984, and Master of Public Health and Doctor of Sciences both from Harvard University School of Public Health in Boston. He served as the Director-General of Bureau of International Cooperation in the Ministry of Health in 2004 to 2007, and the advisor to the Ministry of Health in international affairs since 2002, further served in Geneva and Brussels as health representative for Health Ministry. His major interests are on occupational and environmental medicine, radiobiology, radiation protection, global Health, and international relationship. Prof. CHANG has published more than 120 scientific articles on international Journals, as well as several books and chapters.



PROFESSOR JÜRGEN M. PELIKAN, PHD

Jürgen M. Pelikan, PhD is Professor emeritus for sociology at University of Vienna /Austria and Director of the Competence Center for Health Promotion in Hospitals and Health Care at the Austrian Public Health Institute in Vienna / Austria. He has co-initiated the European Health Literacy Survey (HLS-EU) and was its PI for data analysis and reporting. Later he was directing further research on health literacy of specific populations (adolescents, migrants) and on health literate health care organizations in Austria and was PI in an EU-Project on diabetes health literacy. He is a co-editor of the WHO publication Health Literacy – The Solid Facts. Actually he is co-chairing a working group on “Health Promoting Hospitals and Health Literate Health Care Organizations” of the International Network of Health Promoting Hospitals and Health Services and also is co-chairing the Action Network for Measuring Population and Organizational Health Literacy (M-POHL) of the European Health Information Initiative (EHII) of WHO-Europe. He is the international PI of the next European health literacy survey HLS19. He is a member of the Executive Board of the International Health Literacy Association (IHLA) and of the Scientific Advisory Board of the Asian Health Literacy Association (AHLA).



PROF. STEPHAN VAN DEN BROUCKE, PHD

Professor of Health Psychology at the Department of Psychology, Faculty of Psychology and Educational Sciences, Université Catholique de Louvain, Belgium. Stephan van den Broucke is Professor of Health Psychology at the Department of Psychology, Faculty of Psychology and Educational Sciences of the Université Catholique de Louvain, Belgium. Formerly a senior expert at the Flemish Institute for Health Promotion in Brussels (1993-2005), a project officer at the Executive Agency for Health and Consumers of the European Commission in Luxembourg (2006-2009), and an Associate Professor at the Department of International Health, Faculty of Health, Medicine and Life Sciences of Maastricht University, The Netherlands (2009-2010), he has coordinated and supervised a large number of national and international research projects in the areas of health promotion planning and evaluation, mental health promotion, health inequalities, capacity building and health literacy. He serves as an expert adviser to the European Commission as Health and Research Directorate Generals and as a technical adviser for the World Health Organisation, and is a member of the executive team of the Regional Committee for Europe of the International Union for Health Promotion and Education (IUHPE). In addition to his teaching assignment at the UCL, he also teaches in the Master program in Psychology at the KU Leuven, Belgium, and has been a guest lecturer at various universities and institutes across Europe. Stephan van den Broucke holds a Ph.D. in Psychology (KU Leuven) and a degree in Complementary Studies in Health Policy (University of Antwerp). He is author or co-author of more than 50 peer-reviewed international publications and author and editor of several books.



A/PROF. NATASHA KHURSHID, MBBS, MPH, PhD

Dr Natasha K (MPH, PhD, and Associate Professor of Public Health) is currently working as the Managing Editor of National Bulletin of Public Health, Bangladesh, the only PH Bulletin from Institute of Disease Control and Research (IEDCR) under the Ministry of Health and Family Welfare, Government of People's Republic of Bangladesh. She also works as guest faculty in different universities. She is recognized as a prominent Health Communication Expert and the only 'Health Literacy Professional' in Bangladesh. She is involved in research, social work in health and educational sector and nationally renowned as media personality. She is representing the AHLA Country Office - Bangladesh hosted by Somadder Welfare Foundation.

KEYNOTE SPEAKER



PROF. KRISTINE SØRENSEN, PHD

As a thought leader Kristine Sørensen is committed to advance the global scope of health literacy. Her educational background is in medicine, public health and global health diplomacy. Kristine Sørensen is the founding director of the Global Health Literacy Academy, Denmark. She is the first President of the International Health Literacy Association and Executive Chair of Health Literacy Europe. She is also a member of the World Health Organization Technical Advisory Group on Health Promotion in the SDGs. Kristine Sørensen has been a health literacy advisor to the European Commission, the European Centre of Disease Control, the European Parliament, the European Council and McKinsey. Currently, she is a member of the global advisory boards of the Asian Health Literacy Association, Bridge4Health (CAN), MILSA – migrant health literacy (SWE) and Health Literacy for Children and Adolescence (GER). She is in the editorial board of the Journal of Health Literacy Research and Practice and an active member of the International Union of Health Promotion and Education as well as Rotary International. With colleagues, Kristine Sørensen was honoured the European Health Award 2012, the International Health Literacy Award 2017 and the AHLA Global Health Award 2018.



A/PROF. SABRINA KURTZ-ROSSI

Sabrina Kurtz-Rossi, M.Ed., is Assistant Professor of Public Health and Community Medicine at Tufts University School of Medicine and Director of the Tufts Health Literacy Leadership Institute. She is Principal of Kurtz-Rossi & Associates, a consulting group offering health, literacy, education, and evaluation services. Prof. Kurtz-Rossi is especially recognized for her health literacy work to improve patient-provider communication, build health literate health care organizations, and develop easy to read health information for diverse audiences.

In 2016, Ms. Kurtz-Rossi received the Association for Prevention Teaching and Research (APTR) Health Literacy Teaching Award for her work with health professions students. In 2017, she received an Innovations in Diversity Education Award (IDEAS) from the Dean's Office at Tufts University School of Medicine to exam online discussion as an instructional method for teaching health literacy and cultural humility. She was honored in 2018 by the Asian Health Literacy Association (AHLA) with the International Health Literacy Award for her efforts with students and professionals all over the world to improve health literacy.



PROF. DIANE LEVIN-ZAMIR, PHD, MPH, MCHES

Professor Diane Levin-Zamir is the National Director of the Department of Health Promotion of Clalit, Israel's largest healthcare organization. She is an Associate Professor at the School of Public Health at the University of Haifa in Israel. She is one of the founders and leaders of the Global Working Group on Health Literacy of the International Union Health Promotion and Education. She chairs the National Council of Health Promotion of the Israel Ministry of Health and was one of the founders of the Israel Health Promoter and Health Educators Association. She specializes in action research and policy development in health promotion in community primary care, children and adolescents, people with chronic conditions, hospital and media settings, media/digital health literacy, and measuring population health literacy. Diane also specializes in cultural appropriateness for health on the policy, research and practice levels. Diane was the principal investigator for the National Survey on Health Literacy in Israel. She is a scientific advisor for the Asian Health Literacy Association, as well as for the Health Literacy for Children and Adolescents project in Germany. Diane has published extensively on numerous aspects of health literacy and health promotion.

KEYNOTE SPEAKER



PROF. ANGELA Y.M. LEUNG, PHD, MHA, BN, RN, FHKCGN, FHKCERN

Dr. Angela Leung is Director of the Centre for Gerontological Nursing (CGN) / Leader of research theme 'Aging and Health' and Associate Professor of the School of Nursing of Hong Kong Polytechnic University. She was the awardee of the Hartford Geriatric Scholars Program at the Johns Hopkins University in 2014. She is an active researcher in health literacy, health promotion, and chronic care, with a wide range of publications in international journals. Her key interest is to reduce health disparity, particularly for the aged population and caregivers. She developed various interventions addressing the issues of inadequate health literacy and challenges encountered in chronic care. She has a strong belief that technology can help in chronic care and health promotion. Her recent innovations include: interdisciplinary online learning platform that increases the awareness of symptoms of dementia and care needs; a mobile application for assessing diabetic risk and promoting lifestyle modification. This app has been used by 13,000 people or more since 2014.



PROF. PARAS K POKHAREL

Dr. Paras K. Pokharel, Currently working as a professor at the School of Public Health & Community Medicine (SPH&CM) at BPKIHS, a leading health institute in Nepal. Apart from being engaged for more than two & half decades in primary health care, public health academics & researches, Dr. Pokharel also served in many Regional Technical Advisor Committee in Public Health Topic mainly emerging and reemerging vector born diseases with WHO, SEARO from Nepal. He initiated and played key role to establish School of Public health at BPKIHS. He is a dynamic advocate for total human development through Public health policies through academics and informed evidence based health sciences education & research. He is also an adjunct Professor of Indian School of Public Health New Delhi, Public Health Foundation of India. He has number of publications on health literacy and other relevant health issues of low and middle income countries. At present he is also a member of Advisory Committee for Health Research, World Health Organization-Southeast Asia Region. He is one of the executive Board Members of Asia Health Literacy Association.



PROF. MA. CARMEN C. TOLABING

Dr. Ma. Carmen Tolabing is a Public Health Professional with specialization in Epidemiology. She has devoted her professional life to teaching and research work. She teaches courses like Epidemiology, Biostatistics and Health Research Methods to public health and medical students. Carmen's research interests include health information system, health human resources, evaluation of public health programs/interventions, and health literacy. She designed the web-based National Database of Human Resources for Health (NDHRH) Data Collection System for DOH and came up with the Baseline National Database of Selected Human Resources for Health. Her work on the extent of utilization of the NDHRH served as input for the issuance of DOH-Administrative Order 2015-0017 "Guidelines on the Use of National Database of Selected Human Resources for Health Information System (NDHRHIS)" which enables the generation of nationwide statistical data on health human resources. She also established the activity standards for selected health providers in field health facilities which served as inputs in the development of the Workload Indicator of Staffing Needs (WISN) calculator for selected health providers in field health facilities in the Philippines. The result of her study on the completeness and acceptability of the cause of death statement in death certificates was utilized by DOH to implement an educational intervention to improve cause of death certification. Among the public health interventions that she has evaluated are the WHO-Reaching the Urban Poor Project and the DOH-Basic Emergency Obstetrics and Newborn Care program. She is Principal Investigator/Project Leader of the National Health Literacy Survey.

KEYNOTE SPEAKER



A/PROF. NATASHA KHURSHID

Dr Natasha K (MPH, PhD, and Associate Professor of Public Health) is currently working as the Managing Editor of National Bulletin of Public Health, Bangladesh, the only PH Bulletin from Institute of Disease Control and Research (IEDCR) under the Ministry of Health and Family Welfare, Government of People's Republic of Bangladesh. She also works as guest faculty in different universities. She is recognized as a prominent Health Communication Expert and the only 'Health Literacy Professional' in Bangladesh. She is involved in research, social work in health and educational sector and nationally renowned as media personality. She is representing the AHLA Country Office - Bangladesh hosted by Somadder Welfare Foundation.



PROF. ALTYN ARINGAZINA

Prof. Altyn Aringazina (ScD, PhD) is Head of the Department of Population Health and Social Sciences at the Kazakhstan School of Public Health, Medical University in Almaty. Dr. Altyn Aringazina has rapidly acquired extensive experience in health promotion policy and practice by working with colleagues at the highest levels of academe and government within Kazakhstan and CIS countries, and also with colleagues around the globe. She is recognized throughout the CIS countries and by the WHO as a key resource for health promotion and disease prevention efforts. As the principal author of several critical studies of health promotion capacity in Kazakhstan, Prof. Aringazina has emerged within Kazakhstan and CIS countries as a leading scholar of health promotion and public health. She was elected as a member of the WHO Expert Advisory Panel on Health Promotion for 2009-2013. In this capacity she has participated actively in a number of WHO activities in the European Region and globally. Dr. Aringazina has also worked productively as a globally elected member of the Board of Trustees of the International Union for Health Promotion and Education (IUHPE), an organization in which she is considered a highly valued leader and catalyst for change. Dr. Aringazina holds a Doctor of Medical Sciences and is a manager in Public Health at Virginia Commonwealth University (VCU) in the U.S. Prof. Aringazina has received several international academic awards, including Fulbright and Fogarty grants. Dr. Aringazina conducted postdoctoral research at Columbia University in New York City. Prof. Aringazina is Associate Scholar at the Institute for International Health and Education (IIHEUS) in Albany, USA.



PROF. HSIU-HSI CHEN

Prof. Hsiu-Hsi Chen is an expert in evaluation of intervention program, with emphasis on population-based cancer screening and also universal vaccination program, by using a series of complex statistical modelling to deal with several thorny issues that cannot be solved by classical approaches. These include the development of different health economic decision models for cancer screening program and also vaccination program and prophylactic treatment. The recent statistical publications on the methodology of applying stochastic process to evaluation of cancer screening model published in JASA and Biometrics with Bayesian and non-Bayesian approach have facilitated the development of health economic decision models. A series of original articles cost-effectiveness (benefit) analysis based on these models have been published in international peer review articles. Regarding international academic cooperation, Professor Chen has taken the presidency of the international Asian Cancer Screening Conference (Network) held annually since 2004. As far as collaborative research in Western countries is concerned, the long-lasting collaboration with Sweden (Falun Central Hospital), the USA (American Cancer Society), United Kingdom (Wolfson Institute of Preventive Medicine), and also Finland (School of Public Health, University of Tampere) where Professor Chen was awarded the Finland Distinguished Professor (FIDIPRO) issued by the Academy of Finland between 2007 and 2009.



A/PROF. PONGDECH SARAKARN, PHD

Vice Dean of Research and Academic Service Affairs, Department of Epidemiology and Biostatistics, Faculty of Public Health, Khon Kaen University, Thailand.

KEYNOTE SPEAKER



PROFESSOR LI-SHENG CHEN, PHD

Dr. Chen graduated from Taiwan National Yang Ming University. Following postdoctoral work on cancer screening evaluation in Finland at Tampere University and in Taiwan at National Taiwan University. Then, from 2007 to 2010, he was vice-Chief at the Cancer Center in Changhua Christian Hospital. He returned to Taipei in 2010 and is currently Faculty to School of Oral Hygiene, College of Oral Medicine, Taipei Medical University. He works with many local and nation governments, professional advisory committees and working groups. His research interest is the cancer screening and prevention, with the emphasis on the outcomes research.



A/PROFESSOR VO VAN THANG

Director of ICHR, Dean of Faculty of Public health- Hue University of Medicine and Pharmacy. Honourable Professor of Queensland University of Technology (QUT), Australia

Participating as a lecturer in postgraduate training for many universities internationally such as: the Netherlands, Italy and Australia. Authors of many scientific research projects nationally and internationally. Excellent experience in mentoring for many research projects in public health and medical education, supervising for many study programs in Hue city of undergraduate and post graduate students from universities and organization internationally (Australia, the Netherlands, the US; among which there were 7 PhD projects and more than 50 Bachelors of public health and Social workers from QUT, Australia, co-supervisor of 1 PhD project completed at QUT in 2011). As a founding leader in the Sub-Mekong Regional Public Health Network, he has enabled active collaborators between Hue UMP and many universities in China, Cambodia, Myanmar, Laos, Thailand and Philippines.



PROF. MANUEL P EISNER

Prof Manuel Eisner is Wolfson Professor of Criminology, Director of the Violence Research Centre (www.vrc.crim.cam.ac.uk/) and Deputy Director of the Institute of Criminology, University of Cambridge.

His academic work revolves around the explanation of the causes, the consequences and the prevention of interpersonal violence across human societies. He has also been working as an expert or co-author of reports with national governments, the World Health Organization, UNICEF, the World Bank and UNODC. In 2014, he organised, with the World Health Organization, the First Global Conference on Violence Reduction at the University of Cambridge. He is the Principal Investigator of the Evidence for Better Lives Study (EBLS), an innovative global birth-cohort study in eight cities across the world at the University of Cambridge and of the Zurich Project on the Social Development from Childhood to Adulthood, with the University of Zurich. You can find his biography and a list of his publications at www.crim.cam.ac.uk/People/professor-manuel-eisner.



A/PROFESSOR HOAT NGOC LUU MD. MSC.EPI. PHD

Luu Ngoc Hoat currently works as a senior lecturer at the Biostatistics and Medical Informatics Department of Hanoi Medical University (HMU), Hanoi, Vietnam. He studied Medical Doctor at HMU, Master of Science in Epidemiology in UP Manila (the Philippines), PhD in Medical Education in Free University (Amsterdam, the Netherlands). He was Vice President of HMU, Vice Director of HMU Hospital and Head of Biostatistics and Medical Informatics Department of HMU. Hoat has been doing research in Public and Community Health, Medical Education, Evidence-based Medicine, Planning, Management and Medical Informatics. He has been developing and managing more than 30 international collaboration projects since 1995, focusing on Medical Education, Evidence-Based Planning and Hospital Management.

KEYNOTE SPEAKER



PROF. MICHAEL P DUNNE

Michael has an Honours degree in Psychology and a PhD in Experimental Psychology. Since the late 1980s he has taught and been engaged in research across a number of Public Health fields, with a primary focus on the social epidemiology of mental disorders. Since the early 2000's he has worked extensively in East Asia. He has supervised 51 PhD students, 60% of whom are international.

Michael is currently part of a multidisciplinary team undertaking a 5-year study into the health outcomes and burden of disease caused by child maltreatment. Funded by the NHMRC, the study will survey 10,000 Australians with the aim of providing government and public policy makers knowledge to reduce the widespread mental and physical impact of child maltreatment.

Prevention of violence against children; quality of life in people with chronic disease; social epidemiological analysis of mental health in East Asian cultures



PROF. LE VU ANH

Over the course of his career, Prof Le Vu Anh served as the Founding Dean of the Hanoi School of Public Health. He is also the founding President of Vietnam Public Health Association. He has served as the Head of the Dept. of Biostatistics and Epidemiology and the Head of Environmental Health Department of the HSPH. He is initiator and founder of the field laboratory placed in Chiling district, Vietnam and being elected as an official member of the scientific and technology committee of the Ministry of Health. His academic focus is a multidisciplinary perspective on the problems of development and change in evolving human society.

Prof. Le Vu Anh has directed many intervention, training and research projects during his career with funding from USAID, WHO, and CDC as well as numerous consultancies in development programs throughout Southeast Asia. His current research activities are focused on capacity building and human resource development via NCD prevention and control Programs in Vietnam.



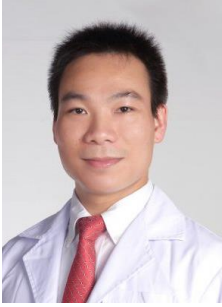
A/PROF NGUYEN DUC CHINH M.D., PH.D

Chief of Department of septic surgery; Deputy chief of General Planning Department



KEIKO NAKAMURA MD PHD

Keiko Nakamura MD PhD is Professor and Head of the Department of Global Health Entrepreneurship, Division of Public Health, Graduate School of Tokyo Medical and Dental University (TMDU). Prof Nakamura also serves as the Director of WHO Collaborating Centre for Healthy Cities and Urban Policy Research. She is a member of Science Council of Japan and a Board member of Japanese Society of Public Health. Prof Nakamura is a public health scholar with over 25 years of experiences with Healthy Cities in the Asia-Pacific region. She has researched health and environment in urban areas, with particular focus on: determinants of health; healthy cities and urban policy; use of information technology for health promotion; trades in health services; and cooperation for health development. She has worked with global Healthy Cities movement since the 1990's and is strongly committed to the Alliance for Healthy Cities, an international network, as the Head of its Secretariat. She has published extensively in peer-reviewed journals and has been closely working with various institutions and levels of government through research, health planning, and health promotion activities.



A/PROF. TUYEN VAN DUONG PHD

Dr. Duong is currently a Research Fellow at the School of Nutrition and Health Sciences, Taipei Medical University, Taiwan. He also serves as a Vice president of Asian Health Literacy Association, London, UK. In 2018, he was invited as a Guest Faculty of Tufts University School of Medicine, Boston, USA. His research interests are focused on health literacy, e-healthy diet literacy, development and validation of research instruments, active aging, healthy eating index, dietary pattern, macro- and micro-nutrients, body composition, cardiovascular disease risks, metabolic syndrome, hemodialysis, mortality, chronic obstructive pulmonary disease, chronic kidney disease.



A/PROF. NGUYEN THANH HIEP PHD

Assoc.Prof.Dr. Nguyen Thanh Hiep graduated from regular medical school in 2000 and graduated for 5 years in France with a major in Applied Clinical Epidemiology, one of the youngest medical doctors in Vietnam in 2005. Assoc. Hiep used to be a Resident at French Hospitals and a treating doctor at the Nephrology Department, Hospital 115. At the same time, he is a specialist in Family Medicine and a senior lecturer of Pham Ngoc Thach Medical University, one of the young associate medical professors was conferred in 2015.

Assoc.Prof.Dr. Nguyen Thanh Hiep is in charge of the clinic's technical expertise and is one of the leading experts in this field in Vietnam, having many cooperative relationships with Belgian, French, American and Australian experts.

ORAL PRESENTATIONS

Session 1: Health literacy in media & communication

SS 1 KEYNOTE

When Health Literacy meets Innovation for reducing disparities in a universal healthcare system; from digital divide to digital development

Prof. Diane Levin-Zamir, PhD, MPH, MCHES, University of Haifa and Clalit Health Services, Israel

diamos@zahav.net.il

In many countries across the globe, communication with the patients and the public is increasingly becoming digital. This trend has great advantages, among them bringing health information and navigation directly into homes, allowing for personal data to be stored and then accessed for the benefit of the patient, increased efficiency, creating big data for analysis and technology development and more. Yet, digitalization creates demands of the public with regard to digital health literacy - the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem. Until recently, the phrase coined: "digital divide" has been used to highlight the disparities in the public regarding the use of mobile phones, the skills needed to manage health and healthcare in a digital world and more, where large groups were assumed to have been left behind. An asset-based approach to understanding digital health literacy would see that the disparities can be reduced by using digital tools to empower the patient and the public with regard to their health. Examples and case studies demonstrating innovation in both the public health system and in universal healthcare systems throughout the lifespan will be presented from Israel and other countries. Topics to be presented include intervention and action dealing with vaccine resistance, living with chronic health conditions, promoting cultural appropriateness of the health system and adopting the approach that health literacy is a human right. In summary, a shift from "digital divide" to "digital development" will be proposed. Finally, future areas for research, practice, policy and collaboration will be recommended.

SS 1 KEYNOTE

Improving Health Literacy through Media: An Initiative

Dr Natasha K

Country representative –AHLA Bangladesh

Associate Professor Public Health

Health literacy denotes to the cognitive and social skills that enable people to gain access to, understand and apply health information to positively influence their own health. In a bigger canvas we find public health literacy that refers to the

capabilities of the population to better understand and utilize the health information, related not only to the individual, but also to the community. In this modern digitized world, media including newspapers/bulletins, television, internet and mobile apps are the vital elements to set the skills of an individual for developing or improvising the health literacy. To increase the dissemination and use of evidence-based health literacy practices and interventions, there is no way other than media. Thus public health literacy needs them in a more embracing way. Understanding this fact, public health literacy professionals in Bangladesh commenced to involve media in a multifaceted way. Publishing a regular public health bulletin at national level, regular view sharing meetings between research institute/s & press/media and encouraging to broadcast health news/shows in all TV channels are the approaches. National Bulletin of Public Health (NBPH) is the first, national, open access, scientific, peer-reviewed, bilingual public health bulletin from the Government of Bangladesh available in both hard and electronic version. This is delivered to each and every govt. health centers (up to sub district level) as a single, go-to source for key public health recommendations. Availability and bilingual presentation made it unique and accepted to all level. Experiencing the successful feedback from recent dengue outbreak, encouraged to publish the bulletin more frequently. Training media persons for promoting public health news is another mission. Embroiling health journalists to improve their usual pattern of presenting health news will help the mass community to get the correct news and information rather becoming panic or nonreactive. Getting huge positive responses from media field enthused to institutionalize the strategy. The goals of public health literacy will definitely be achieved when media would be able to understand and catch up the in depth tune and stratagem which mostly depends on the strategies taken by the public health professionals to guide them.

SS 1

Youtube channel as an opportunity to improve health literacy among patient through hospital television: The case of InaHealth TV

Fatwa Sari Tetra Dewi 1, 2, Mei Neni Sitaresmi 1, 3, Fitriana M Kusumaningrum 1,2, Wisaksono Adhi 1

1..InaHealth TV, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

2. Department of Health Behavior, Environment and Social Medicine, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

3. Department of Child Health, Faculty of Medicine, Public

There is a high demand to improve patients' health literacy in all health services despite the limited time of the health provider have. There is an opportunity to use informatics technology using available hospital TV to deliver health information, however media of health information needs resources to supply. InaHealth TV, a Youtube channel were developed by academicians and health professions to address this demand. This InaHealth channel produce on monthly basis 11 different programs ready to use for all health services. Health information were arranged in a high quality of health content but in entertaining format suitable for lay people. Videos can be selected, downloaded, stored, broadcasted or distributed freely by health services. Unavailable topic in demand can be requested to the InaHealth TV management. Stages and arrangements for building and accessing InaHealth TV will be presented.

Keywords: health literacy, youtube, hospital television

SS 1

Media Literacy and Smoking Prevention on Children

Nurjanah 1,2, Retno Sutomo 1, Peter Wushou Chang 3, Fatwa Sari Tetra Dewi 1

1. Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Indonesia
2. Faculty of Health Sciences, Universitas Dian Nuswantoro, Indonesia
3. Tufts University School of Medicine, Boston, USA

The children are at risk of having unhealthy behavior because of the unhealthy information is abundantly available in the media, especially tobacco advertising, promotion and sponsorship (TAPS). Indonesia is the only country in the Asia Pacific that has not ratified the FCTC. Moreover, the low tobacco control regulation affected the high prevalence of smoker, particularly on children. Indonesia's national health survey showed that young smokers have increased significantly from 7.2% to 9.1% between 2013 and 2018. Some studies showed that children were the target of cigarette marketing. The attracted cigarette advertisements were placed surround schools and in various online media massively. This subliminal tobacco advertising strategy causes misperceptions in children. For example, the positive images in tobacco advertisements and the availability tobacco product in the point of sales caused the children assumption that cigarette was the ordinary product and directed them to the smoking intention. In this situation, media literacy is very strategic to protect young people from the tobacco marketing that bombarded them. The presentation will provide emerging literatures on how media literacy role improved critical thinking to prevent smoking behavior on children.

Keywords: media literacy, tobacco advertisements, children

SS 1

Effect of the health behavior development program by applying media health literacy skill to prevent type 2 diabetes mellitus among at-risk population at Pan Charoen sub-district health promoting hospital, Wanon Niwat district, Sakon Nakhon province.

Saksit Khamkor 1, Rujira Duangsong 2

1. Master student of Public Health Program (Health Education and Health Promotion). Faculty of Public Health, Khon Kaen University, Khon Kaen, Thailand.
2. Asst. Prof., Department of Health Administration, Health Promotion, Nutrition. Faculty of Public Health, Khon Kaen University, Khon Kaen, Thailand.

Background: the recent year, Thai population at high risk of developing to type 2 diabetes mellitus (T2DM), it is important to take action now to reduce the risk of developing T2DM. However, their effects on preventing T2DM in the at-risk population have not been evaluated.

Aims: to examined the effects of the health behavior development program by applying media health literacy skill to prevent type 2 diabetes mellitus among at-risk population at Pan Charoen sub-district health promoting hospital, Wanon Niwat district, Sakon Nakhon province.

Methods: the quasi-experimental research (one group pretest-posttest design) consisted of 35 at risk-population of T2DM at Pan Charoen sub-district health promoting hospital. The samples in received a 3-months intervention, including an 12 week education on media literacy for reduce fasting blood sugar (FBS), and developing behaviors on exercise, and eating control. Data were analyzed by using descriptive statistics. And the inferential statistic was used pair t-test for comparing before and after with a significantly statistical at 0.05 level.

Results: After participatory the program, the samples had higher mean score of media health literacy skill, and health behaviors before intervention at a significantly statistical (p -value < 0.001). And the FBS level of the samples also had better than before the trial at a significantly statistical (p -value < 0.001).

Conclusions: based on the behavior development program by applying media health literacy skill, suggests that interventions may reduce to the rate of T2DM and FBS levels. Due to the observed between trial, we recommended long follow-up durations be executed, to confirm intervention lead to reduced T2DM events to the at-risk population in the setting area.

Keywords: At-risk population, Health behavior development program, Media health literacy, Type 2 Diabetes Mellitus .

SS 1

Association between internet using and health information seeking behavior among adults in the central region of Vietnam

Anh Nguyen Dac Quynh 1, Minh Nguyen Ky Nhat 1, Sy Tran Dinh Khanh 1, Tuan Nguyen Minh 1, Huong Ngo Thi Dieu 2

1. Student, Faculty of Public Health, Hue College of Medicine and Pharmacy, Hue University, Vietnam

2. Lecturer, Faculty of Public Health, Hue College of Medicine and Pharmacy, Hue University, Vietnam

Background: The world is entering a digital era, the medical field is no exception. In addition to the availability of traditional media sources, the rapid and widespread development of mass media sources especially the Internet is causing people to face a flood of multi-source health information.

Objectives: (1) To describe the association between internet using and Health Information Seeking Behavior (HISB) and (2) To examine related factors influencing HISB via the Internet among study participants. **Methodology:** This was a cross-sectional study conducted over a 6-month period, from 07/2018 to 01/2019. Samples were 818 adults aged from 18 to 89 from 4 various wards in Hue City, Vietnam. Information was collected through face-to-face interviews by the 4 parts questionnaire was developed from the Health Literacy Survey-Asia-Questionnaire. Multivariable logistic regression analyses were performed at a 95% confidence level.

Results: Study indicated that 48.3% of participants use the internet for HISB and 28.7% only use traditional information sources. Respondents who use the internet for HISB practice more often (daily, weekly) and having knowledge of HISB is 3.2 times better than people using traditional health information resources only. The most popular information channel on the internet is social network (90.1%), very few people access official medical websites (22.3%). Disease and treatment are still the most sought topics, besides, internet users tend to search more for prevention. The factors related to HISB via the Internet are: age (OR= 3.139; 95%CI: 1.943–5.073), economic condition (OR= 4.650; 95%CI: 1.327–16.289), doctor-reported health status (OR= 1.898; 95%CI: 1.259–2.861) and education (OR= 3.625, 95%CI: 2.456–5.351).

Conclusions: Using the Internet to find health information is related to the quality of HISB. How to improve the quality and reliability of mass media, especially information on the Internet, is an important issue, policies for managing online health information resources should be developed and enabling people to access official information sources.

Keywords: Health Information Seeking Behavior (HISB), Internet, mass media, Vietnam

SS 1

Reliability and validity of the internet gaming disorder-20 test among Vietnamese teenagers

Thanh Pham Hai; Son Dinh Thai; Toan Do Thi Thanh; Minh Luu Ngoc; Hung Le Xuan; Huong Nguyen Thi Thu; Hiep Nong Bich; Uyen Hoang Thu; Trang Le Thi Thu, Hoat Luu Ngoc.
Hanoi Medical University, Ha Noi, Viet Nam

Background: Within the past decade, researchers have examined the disadvantageous impacts of Internet and video

game addiction. For the first time, WHO is classifying Gaming disorder as an addictive behavior disorder in the 11th Revision of the International Classification of Diseases (ICD-11). The percentage of Vietnamese youths was found that suffered the internet addiction, as well as the online game addiction, was high. However, there is not any validation tool to study in the IGD fields for Vietnamese teenagers.

Objectives: This study was investigated to validate the Internet Gaming Disorder-20 Test, from which to find out the appropriate version for Vietnamese teenagers.

Methods: A survey was conducted with 349 gamers from secondary and high schools - 90% males, mean age 16 years (SD =1.4) - from 28 game stores that agreed to accept the survey in Hanoi, Vietnam. The IGD-20 Test comprised 20 items with six different dimensions: salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse, using a 5-point Likert scale. Basing on the Vietnamese version questionnaire, Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were used to examine the validation, Cronbach's Alpha was performed to test the reliability and Latent class analysis (LCA) was preferred to identify the level of IGD. Moreover, the ROC curve diagram was used with the highest Youden's Index parameter to determine the best cut - off point.

Results: The EFA proved that the VN-IGD-Test with 10 items, which was divided into a four-factor structure (Mood Modification; Tolerance; Conflict and Relapse). The model indexes of the questionnaire were: RMSEA = 0.071; RMSR = 0.049; GFI = 0.958; TLI = 0.904 and CFI = 0.938. The values for Cronbach's alpha coefficient ranged between from 0.695 to 0.746 and Cronbach's alpha for all 10 items of the VN-IGD-10 Test was 0.745. The latent class analysis found out four levels of IGD: regular gamers, low-risk engaged gamers, high-risk engaged gamers, and disordered gamers. Additionally, the optimal empirical cut-off point with the highest Youden's Index was 26.5 (out of 50) with the excellent sensitivity and specificity analysis carried.

Conclusion: The present study findings illustrated that the VN-IGD-10 Test could be used as a valid and reliable tool for assessing internet gaming disorder in Vietnamese teenagers. Moreover, this conclusion could become evidence to contribute to the diversity of cultural validation of the IGD-20 Test in gaming study field.

Keywords: Internet gaming disorder, validation, teenagers, health literacy, questionnaire.

SS 1

Relationship between health information seeking sources and eHealth literacy among adults in China

May O. Lwin, Chitra Panchapakesan, Jiahui Lu, Anita Sheldenkar, Gemma Calvert, Lewis Lim
Wee Kim Wee School of Communication and Information, Singapore

Purpose: Information and Communication Technology

provides novel ways of seeking health information, promoting health communication, and treating disease; also termed "eHealth. eHealth usage can help develop better self-care behaviors and a healthy lifestyle. eHealth usage can have sustainable economic net benefits by providing better patient treatments and increased efficiency for patient management.

Aims: This study investigates the determinants of eHealth literacy including sociodemographic characteristics and health information seeking sources. The findings can help employ future eHealth interventions and development. Specifically, this study is conducted in the context of China. China is the largest developing country in the world with 731 million Internet users (penetration-rate 53%) and 1.3 billion mobile phone users (penetration-rate 90%).

Methodology: The data were collected from an Internet-based survey of 923 Chinese adults who are residing in China aged from 21 to 55 years old. Participants completed a survey assessing their ehealth literacy and frequency of seeking health information from twelve sources along with sociodemographic variables.

Results: A multi-stage linear regression was conducted to examine the determinants of eHealth literacy. Participants with higher income and higher education reported higher eHealth literacy. In addition, seeking health information from doctors/health care providers, Internet, and social media were associated with higher eHealth literacy. In contrast, seeking health information from other sources was not related to one's eHealth literacy.

Conclusion: The results show that education plays a part in eHealth literacy. Participants who were e-literate showed positive association towards seeking health information from doctors and online media sources which highlights the crucial role of technology. One reason for this could be they would like to confirm the online results with a credible real-life knowledgeable source. Our results emphasize that it is important to educate people who belong to lower socioeconomic status regarding eHealth literacy and that doctors could potentially play a part in improving e-health literacy.

Keywords: eHealth, ICT, Health Literacy

Session 2: Health literacy in media & communication

SS 2 KEYNOTE

Workforce Development to Improve Quality Health and Social Care Services for Older Adults in ASEAN Countries

Keiko Nakamura

Tokyo Medical and Dental University

Due to the rapid increase of older adults in ASEAN countries, the need for inter-professional collaboration in healthcare and social care workers has expanded. In the Philippines and Vietnam, inter-professional collaboration for providing health

and social care services to elderly populations is not practiced in the same manner that it is widely implemented in Japan across the continuum of care.

This paper presents practices of health and social care services to the elderly in the Philippines, Vietnam and Japan, based on reviews and results from focus group discussions with health and social care workers working with older adults. The paper features workforce development aimed at providing quality health and social care services for older adults in ASEAN countries.

Literature on policies, competencies, and training systems built around inter-professional training related to workforces for gerontology care were reviewed. Documents on geriatric and gerontology competencies and existing curricula/training programs for elderly care in the Philippines and Vietnam were analysed and compared to Japan. Focus Group Discussions (FGDs) were conducted with a total of 348 healthcare/ social care workers in primary care centers, hospitals and institutions in both Philippines and Vietnam to hear about working experiences, awareness, gaps between the needs of the elderly and provided services, training needs, and inter-professional communication. Programs to improve capacity for quality inter-professional services towards acceleration of universal health coverage were discussed.

The results of programs and services provided for the elderly, the observed gaps between needs of the elderly and the programs being provided, the current roles and responsibilities of health and social care workers in gerontology care, the working experience in health and social care to the elderly, the training experiences for gerontology care and interprofessional collaboration, the perceived training needs for gerontology care services, and the perceived competencies required in delivering care to elderly were analyzed. This paper discusses public health policy or practices for older adults by validating inter-professional training programs, improving the transfer of skills and information between healthcare professionals and social care workers, the transfer of skills and information between professionals and non-professional social care providers, and creating a multi-stakeholder network which can advocate for better strategies and programs for professionals working with older adults in ASEAN countries.

Keywords: dementia, literacy, caregiving, university student.

SS 2 KEYNOTE

How to Improve Health Literacy and Homecare for Elderly People in Vietnam

Luu Ngoc Hoat

Hanoi Medical University

The development of Vietnam Economic and Health Care during last decades has contributed considerably for increasing of life expectancy of Vietnam people, but also creates more needs for the Health Sector in terms of elderly people care and non-communicable disease issues at

community level. To respond to those needs, Vietnam Ministry of Health has started to train Family Doctor, Community Nurse and introduced Family Clinics in order to improve primary and community health care, but the most important is that how to improve health literacy of elderly people and what model of homecare should be able to apply in Vietnam?

Homecare in general and homecare for elderly people in particular have been applied successfully in many countries, but not in Vietnam since family doctor, community nurse and caregiver have just introduced but not been trained well to work in community and homecare. Besides that, Vietnamese people still have habits to go to good specialized doctor when they get sick, even they have to pay a lot of money for travelling, accommodation and fees for consultation of good doctors. Another cultural aspect of homecare user and provider can also influence to homecare application, that is the homecare user prefers to pay to provider directly, not indirectly through a homecare company to save more money, therefore homecare companies have difficulties of keeping and increasing both homecare users and providers.

This presentation will discuss about how to improve health literacy and homecare for elderly people in the context of Vietnam.

SS 2

Health literacy and precondition of active ageing among Malaysian public employees

Tin T. Su 1, Nor H.A Bahuri 2, Mas A. Said 3

1. South East Asia Community Observatory (SEACO), Jeffery Cheah School of Medicine and Health Sciences, Monash University Malaysia
2. Ministry of Health Malaysia
3. Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, Malaysia

Background: Malaysia is projected to become an ageing nation in 2030. Previous study reported that 60% of Malaysian adults have limited health literacy. It underlines the need to assess if the health literacy can be used effectively to improve long term population health outcomes particularly in older adults.

Objectives: To assess the role of health literacy in quality of life, which was operationalized as a precondition of active aging among public employee in Malaysia.

Method: The study was conducted among randomly selected (533) public employees ages 40 to 60 years old in Johor state, Malaysia in 2017. The validated Malay version of WHO Quality of Life Instrument (WHOQOL-BREF) and the Short-Form Health Literacy Instrument (HLS-SF12) were used to assess perceived quality of life and general health literacy respectively.

Results: The participants' preconditions related to active aging were worrisome as 28% perceived their quality of life as poor and 34% were dissatisfied with their health. Turning to health literacy, the majority of the participants (45.7%) had

sufficient health literacy, 11.3 percent had excellent health literacy and the remainder had limited health literacy. There were positive and significant associations of health literacy with all quality of life six outcomes. The result of the multivariable logistic regression analyses showed that sufficient health literacy (AOR 4.32), and excellent health literacy (AOR 5.92) were significantly associated with a perceived good quality of life. Similarly, sufficient health literacy (AOR 2.68) and excellent health literacy (AOR 6.71) were significantly associated with health satisfaction.

Conclusion: The findings suggest an association among health literacy with the quality of life, a surrogate measure of the preconditions of ageing actively among older Malaysians. This study provides an opportunity for future longitudinal studies to assess the changes in the quality of life of Malaysian adults when they become more than 60 years old.

Keywords: Health Literacy, Active ageing, Ability for active ageing, Older adult, Quality of life

SS 2

The relationship between health literacy and self-management behaviors in older adults with hypertension

Nguyen Van Chung 1, Tran Quoc Cuong 1, Dao Thai Anh 1, Nguyen Huu Quyen 1, Tran Van Tot 1, Duong Van Tuyen 2, 3, Peter Wushou Chang 4.

1. Anesthesia Department, Thu Duc Hospital, Ho Chi Minh city, Vietnam
2. School of Nutrition and Health Sciences, Taipei Medical University, Taipei, Taiwan
3. Institute of Health Policy & Management, National Taiwan University
4. Asian Health Literacy Association AHLA, Geneva, Switzerland

Background: Hypertension has become a significant public health problem especially in developing countries. The complications of hypertension account for 9.4 million deaths worldwide every year. None of the studies found in the literature review tested the health literacy – self-management behaviors relationship in the hypertension population.

Aims: To investigate the relationship between health literacy and the level of self-management behaviors in hypertensive older adults.

Method: A survey was conducted at Thu Duc District, Ho Chi Minh City with the total samples of 300 people in the community from July to September 2019. We recruited outpatients diagnosed with hypertension are 65 years of age or above. The study variables included 1) Demographic variables and lifestyle data (age, gender, education level, marital status, income, employment, smoking, regular exercise, alcohol assumption, years of hypertension, comorbidities, health accessibility and utility, body mass index, diastolic and systolic blood pressure, 2) Quiz on hypertension, 3) Hypertension self-management behavior questionnaire, 4) Short form of health literacy questionnaire (HL-SF12). Data were analyzed by using Chi-square, ANOVA, Logistic

regression.

Expected Results: Health literacy independently predicts the level of self-management in older adults with hypertension after adjustment of confounding factors. Studying the positive correlation of this relationship could have promising results in terms of enhancing self-management behaviors which could ultimately reflect in the patient's blood pressure control.

Conclusions:./.

Keywords: Hypertension, self-management, health literacy, older adults.

SS 2

A social epidemiological perspective to the relationship between health literacy and oral health of older persons in Ghana

Padmore Adusei Amoah 1, Adwoa Owusuaa Koduah 2, David R. Phillips 3, Kingsley Atta Nyamekye 4

1. Corresponding author: Division of Graduate Studies; Asia Pacific Institute of Aging Studies; Centre for Social Policy and Social Change Lingnan University, Hong Kong (SAR)

2. School of Nursing, The Hong Kong Polytechnic University

3. Department of Sociology and Social Policy, Lingnan University, Hong Kong

4. University of Energy and Natural Resources, Department of Planning and Sustainability- School of Geo-Sciences

Background: Issues surrounding oral health have emerged as a critical public health focus among older persons globally, with those in low-and-middle-income countries (LMICs) clearly at the lower levels of dental health and dental health care. In LMICs, low access to dental care, limited health literacy, and substantial socioeconomic inequalities deprive many older persons of even basic oral health. Social capital has been shown to play a very influential role in older persons' health, but research has paid little attention to oral as opposed to overall health.

Aims: Examines the extent to which individual (bonding and bridging) social capital and community-level (trust) social capital modify the associations between health literacy, and oral health status and attitudes towards preventive oral healthcare among older persons in Ghana. The paper also explores how the role of social capital in oral health compares with its influence in overall health.

Methods: Data derived from a 2018 Social Epidemiology, Universal Health Coverage, Health and Well-Being study in Ghana. Multivariate logistic and ordinal regressions were conducted.

Results: Approximately 44% of the older persons considered their oral health as poor. However, only about 30% maintained a positive attitude towards the use of preventive oral healthcare. Only 17% of participants had sufficient health literacy, but it was positively associated with oral health status, attitudes towards preventive oral healthcare, and overall health. Trust shaped the extent to which health literacy affected attitudes towards preventive oral healthcare. Bridging

social capital was significant for the relationships between health literacy, and oral health status and overall health.

Conclusion: While health literacy is essential for the oral health of older persons, social capital can enhance the chances of positive outcomes and should be considered for inclusion in health promotion efforts.

Keywords: Oral health, health literacy, socioeconomic status, older persons, social capital, Ghana

SS 2

Association of nutritional supplements usage and information sources with gestational diabetes mellitus among pregnant women

Thi Minh Thu Pham 1,2, Nguyen Hoang Minh 2, Chyi-Huey Bai 3, Jane Chao 4.

1. Haiphong University of Medicine and Pharmacy, Vietnam

2. College of Medicine, Taipei Medical University, Taiwan

3. School of Public Health, Taipei Medical University, Taiwan

4. School of Nutrition, Taipei Medical University, Taiwan.

Background: Gestational diabetes mellitus (GDM), the glucose intolerance during pregnancy, is a global problem. The use of nutritional supplements for reproduction and pregnancy is a common practice. The information sources may play a critical role in seeking additional nutritional supports. The search of nutritional information and the use of nutritional supplements base on literacy skills that may have a positive impact on GDM.

Objectives: We aim to identify the most frequently used sources of information related to nutritional supplements, and examine the association between nutritional supplements usage and information sources with GDM among pregnant women in Taiwan.

Method: A cross-sectional study was conducted on 1200 pregnant women. Fasting plasma glucose (FPG) and/or oral glucose tolerance test (OGTT) were assessed for diagnosing GDM. Standardized questionnaires were used to assess the information sources and the usage habits related to nutritional supplements. Logistic regression was used to analyze the associations.

Results: The number of participants with GDM was 41 (3.4%). In comparison with non-GDM subjects, those with GDM had higher pre-pregnancy body mass index (BMI), gestational weight gain and gestational age, high family income, other religions including Christian, Catholic, Muslim, usage of multivitamins and calcium supplementations and had lower proportions of folic acid usage. In multiple logistic regression analysis, higher intake of calcium tablets supplementation was significantly associated with higher odd of GDM (odd ratio, OR= 2.10, 95% confidence interval, 95%CI= 1.07 - 4.16). The combination of higher calcium and vitamin D supplementations was accounted for the lower odd of GDM (OR 0.05, 95%CI: 0.01- 0.52). Most of the nutritional supplements information was retrieved from family, relatives or friends (70.7%), followed by medical providers (48.3%),

media (34.4%) and store/marketing staffs (12.5%), respectively. There was no significant association between the information sources and GDM occurrence.

Conclusion: Results showed that combination usage of calcium and vitamin D was associated with lower odd of GDM. The findings need to be confirmed by longitudinal studies and clinical trials.

Keywords: nutritional supplements, gestational diabetes mellitus, pregnant women

Session 3: Health literacy in Asia

SS 3 KEYNOTE

Prevalence of Limited Health Literacy in the Philippines

Ma. Carmen C. Tolabing, Kim Carmela D. Co, Martin M. Mamangon

College of Public Health, University of the Philippines Manila

Health literacy is necessary for people to effectively manage their health. The role of health literacy in population health has gained recognition in recent years that the UN Economic and Social Council called on member states for the development of appropriate action plans to promote health literacy. In 2015, health literacy toolkits were published including the World Health Organization's Health Literacy Toolkit which provides guidance on empowering communities and strengthening health systems; and the second edition of the Health Literacy Universal Precautions Toolkit which contains guidelines to reduce the complexity of health care and increase patient understanding of health information. Measuring population level health literacy is crucial in identifying the health literacy needs of populations and in designing appropriate interventions to address these needs. Thus, the first National Health Literacy Survey to describe population health literacy in the Philippines was conducted. Specifically, the study determined the health literacy level of Filipinos, the particular dimension and domain of health literacy where Filipinos have limited health literacy. Health literacy level across categories of selected socio-demographic and health-related variables were also determined. A total of 2303 randomly selected 15-70 year old Filipinos were interviewed face-to-face using the adapted version of the HLS-EU-Asia questionnaire. Multi-stage random sampling was employed. The survey was administered using Computer Assisted Personal Interviewing method. Results showed that majority of Filipinos (51.54%) have limited basic health literacy with information access as the dimension with the highest proportion of limited health literacy (45.94%) followed by appraising (43.81%) and understanding (35.78%). Among the three health domains, health care had the highest prevalence (50.93%) of limited health literacy. Disease prevention (41.95%) and health promotion (40.34%) ranked second and third, respectively. There were observed variations in the prevalence of limited health literacy across certain socio-demographic and health-related characteristics. These variations are useful for targeted interventions.

limited health literacy, dimensions of health literacy, domains

of health literacy

SS 3

Comparing the accuracy and the composition between an Indonesia's Health Literacy Survey Questionnaire Sort Form (HLS-EU-SQ10-IDN) and the others short form

Enny Rachmani 1, Nurjanah 2, Peter Woushou Chang 3, Guruh Fajar Shidik 4, Edi Noersasongko 5, Arif Kurniadi 6, Chien Yeh Hsu 7, Ming-Chin Lin 8

1. Department of Health Information Management, Faculty of Health Science, Universitas Dian Nuswantoro, Indonesia
2. Department of Public Health, Faculty of Health Science, Universitas Dian Nuswantoro, Indonesia
3. TUFTS University Medical School, Chung Shan Medical University, Taichung, Taiwan
4. Department of Informatics, Faculty of Computer Science, Universitas Dian Nuswantoro, Indonesia
5. Department of Informatics, Faculty of Computer Science, Universitas Dian Nuswantoro, Indonesia
6. Department of Health Information Management, Faculty of Health Science, Universitas Dian Nuswantoro, Indonesia
7. Department of Information Management, National Taipei University of Nursing and Health Science, Taiwan.
8. Ming-Chin Lin, College of Medical Science and Technology, Graduate Institute of Biomedical Informatics, Taiwan.

Background and Objective: Health literacy Studies have been increasing recently, and 133 measurement tools have been developed to measure health literacy. Europe Health Literacy Consortium developed an HLS-EU-Q47 questionnaire consisting of 12 sub-dimensions and 47 questions developed. The previous study also developed the short version of HLS-EU-Q47 such as HLS-EU-SQ16 and HLS-EU-SQ12. This paper reports the features of Indonesian's short form (HLS-EU-SQ10-IDN) and compared the accuracy of the model compare with another sort form (HLS-EU-SQ16 and HLS-EU-SQ12)

Method: This study analyzed a population-based dataset (1029 samples) from Indonesia-Semarang Health Literacy Survey. This study used RapidMiner studio version 9.1 to explore the accuracy of the dataset. This study compared the accuracy of classification General Health Literacy label among HL-EU-16Q and HLS-EU-SQ12 and HLS-EU-SQ10-IDN. This study examined the predictive accuracy of health literacy level and the composition of the short versions such as HLS-EU-SQ16, HLS-EU-SQ12 Taiwan, and HLS-EU-SQ10-IDN.

Result: The accuracy and the composition of the sort form models were 90.64% and 11 sub-dimension (HLS-EU-SQ16); 88.67% and 11 sub-dimensions (HLS-EU-SQ12) and 90.31% and seven sub-dimension (HLS-EU-SQ10-IDN). HLS-EU-SQ10-Ind put four features on the dimension of finding information on health while HLS-EU-SQ12 focus on applying information on health. The composition of HLS-EU-SQ10-IDN had the biggest proportion of finding health information on because health information seeking behavior still challenging in developing countries such as Indonesia even for health care

professionals.

Conclusion: The HLS-EU-SQ10-IDN has higher accuracy in predicting General Health Literacy Index compare than HLS-EU-SQ12, and it has approximately the accuracy of HLS-EU-SQ16. This study proposed a model with ten features (HLS-EU-SQ10-IDN) as another short version of HLS-EU-Q47 because of this model more precise to measure general health literacy index level. It means the general health literacy index can more accurately predict with only ten features.

Keywords: HLS-EU-Q47; HLS-EU-SQ10-IDN; Health Literacy Questionnaire; Indonesia

SS 3

Validating the HLS-EU-Q47 for the Indian context

Jyoshma Dsouza 1, Sanjay Pattanshetty 2, Stephan Van den Broucke 1.

1. Université catholique de Louvain, Belgium
2. Manipal University, India.

Background/Objectives: Health literacy is increasingly recognized as a key concept for public health. Poor health literacy is closely associated with an improper management of health, suboptimal uptake of preventive and health care services, unhealthy behaviour, increased likelihood for chronic conditions and medical complications, and increased health care costs. In India, studies using the REALM, STOFHL or self-designed questionnaires to assess health literacy have revealed a high prevalence of limited or inadequate health literacy, thus providing a challenge to public health. However, these studies typically involve patients in clinical settings and do not consider health literacy at population level. Moreover, they only focus on functional health literacy and do not consider critical or communicative health literacy. In order to measure health literacy at population level and compare the level of health literacy in India to that of other countries it is necessary to use broader measures of health literacy, validated for the Indian population. To that effect, the present study adapted and validated the HLS-EU Q47 for use in India by providing versions in Hindi and Kannada. Hindi is spoken by 52,83,47,193 (44%) of Indians, and Kannada by 4,37,06,512 (3.6%).

Methods: The original English version of the HLS-EU-Q47, a questionnaire that has been widely used in several European and Asian countries, was translated to Hindi and Kannada by native speakers familiar with health literacy, then back-translated to English and checked for content. The translated versions were then administered to 10 Kannada and Hindi speaking individuals in a "think-aloud" approach to detect any problems in understanding and answering the questions. The time needed to answer the questions and any comments made by the participants were noted and used to refine questions where necessary. A back-translation to English and examination of the content by experts ensured the comparability correctness of the refined questionnaire to the original. The resulting questionnaire was administered a 200

individuals (100 each for Kannada and Hindi) for validation, using stratified purposive sampling based on gender, age, and education level. Selected participants were contacted in person or by e-mail and asked to complete the questionnaire on paper or online. Test re-test reliability was checked in 10% of the participants.

Results: Validation analyses involving internal consistency analysis for the full scale and subscales (accessing, understanding, evaluating and applying health information, and cure, prevention and health promotion) and association of health literacy with sociodemographic variables, self-reported health and health behaviour are currently under way. Discussion: Health literacy remains an under-explored issue in India and needs attention. A validated version of the HLS-EU-Q47 for two of the main spoken languages in India will allow to measure the level of health literacy and its components in populations in India, and compare them to findings from other countries in the region and worldwide. As such, it will contribute to addressing health literacy challenges in India.

Keywords: Health Promotion, Health Literacy, India, Hindi Health literacy tool, Kannada Health Literacy tool.

SS 3

Health Literacy on Influenza Vaccination among High Risk Groups in Thailand.

Pahurat Kongmunag Taisuwat

Bureau of Risk Communication and Health Behavior Development, Department of Disease Control, Ministry of Public Health, Thailand.

Background: Influenza is a respiratory infectious disease affecting worldwide. Thailand has experienced an increased in influenza cases to 50,000 – 200,000 cases from 50,000 to 10,000 cases annually in the last five years. In the first half of 2019 alone, 180,000 influenza cases were confirmed with 14 deaths reported. Most severe and dead cases were among high risk groups including young children, elderly, and people with chronic diseases. Thailand observed an increase despite the government campaigns to provide free seasonal influenza vaccination for the high-risk groups as an effective means to reduce the influenza severity, hospitalization, and absenteeism in the workplace.

Objectives: To better understand why the high-risk groups do not come for vaccination, we conducted research aiming to understand their risk perceptions and health literacy on influenza vaccination.

Method: The study gathered information from 1,260 participants who were healthcare workers, parents of young children, elderly aged 65 and above, pregnant women, people living with chronic diseases, and general population aged 15-64 years in 5 provinces.

Results: The results showed a good level of health literacy on influenza vaccination, self-care while being sick, preventive behaviors from spreading the disease, and seeking medical care when sick. While all the high-risk groups were willing to

pay for the vaccination, accessibility to vaccines among pregnant women, elderly, and people living with chronic diseases seemed lacking because of their willingness to travel to health centers or hospitals for the influenza vaccination as a preventive measure.

Conclusion: Additional advocacy effort and risk communication are required to highlight benefits and risk of forgoing the vaccination among the high-risk groups to increase their participation in the vaccine program and lesson influenza illnesses among these groups.

Keywords: Health literacy, Influenza vaccination, High risk people

SS 3

E-Health Literacy of Medical Students at a University in Central Vietnam

Le Thi Bich Thuy, Nguyen Hoang Lan

Faculty of Public Health, Hue University of Medicine and Pharmacy, Hue University, Hue, Vietnam.

Background: In the digital era, eHealth is an important prerequisite for promoting healthy behavior. Medical students who will be health care service provider need to have appropriate skills to effectively use the sources of health information for their learning and decision-making.

Objective: The study is to measure eHealth literacy of medical students at a university in central Vietnam and to examine factors influencing their skills.

Material and Methods: This is a cross-sectional study. Data were collected through the self-administered structured questionnaire of 410 students who were randomly selected among general medical students and preventive medicine students in the fifth year at Hue University. The eHealth literacy scale was developed on the basis of eHEALS to measure skills for seeking and utilizing sources of eHealth information. Multiple linear regression model was used to identify factors influencing their eHealth literacy.

Results: The study found that the general mean score for eHealth literacy among participants is 27.03 (SD = 3.54). Factors influencing eHealth literacy are genders ($p=0.001$), training program ($p=0.013$), computer skills ($p=0.031$) and purpose of seeking and using medical information ($p<0.001$).

Conclusions: The findings showed that eHealth literacy of medical students in the study setting is still limited. In order to improve these skills of students, the educators should have relevant teaching strategies that promote the interest and skills of students to locate and evaluate eHealth resources.

Key words: eHealth literacy, health resource, medical students, Vietnam.

SS 3

Health literacy and associated factors among inpatients in Lien Chieu District medical center, Danang, Vietnam

Linh Ba Phuong Huynh 1, Lan Hoang Nguyen 2, Sy Van Le 1.

1. Lien Chieu District medical center, Danang, Vietnam

2. Faculty of Public Health, HUMP, Vietnam

Background: Health literacy (HL) is defined as the degree of the individuals 's capacity to access, understand and use basic health information and needed services to make appropriate health decisions. HL is concern of every human being and community involved in health care and maintenance, health protection and promotion, disease prevention and early screening, and policy making. HL also has made a contribution to patient 's health status and utilizing of the health care system. Knowing a patient's HL is therefore beneficial to clinicians and researchers who strive anticipate a patient's ability and provide patient for better instructions and information.

Objectives: The aim of this study was to identify the contents of patient 's HL that are inadequate among inpatients in Lien Chieu District medical center, Danang, Vietnam and determine the factors affecting the HL.

Method: A cross-sectional study was conducted via a random sample of 400 inpatients in Lien Chieu District medical center from June 2017 till December 2017. Patients 's HL was measured by the Chew's Set of Brief Health Literacy Question for detecting Inadequate HL. Multiple linear regression was used to explore the associated factors of HL.

Results: The mean age of participants was 44,9 years \pm 19,3 years, with 64,0% women, 61,2% with junior high school education and below, and 38,8% with senior high school and above. The contents of patients 's HL are most insufficient including reading and understanding written information materials, directions on medication bottles and understanding information of health care provider especially before surgery. Multiple linear regression analysis showed that higher HL is significantly associated with the younger age: 40 – 60 ($B = 1,65 - 11,37, p < 0,05$), $< 40 (B = 1,49 - 22,82, p < 0,05)$; the higher educational attainment: senior high school ($B = 1,21 - 18,12, p < 0,05$), university/ college or higher ($B = 1,75 - 51,27, p < 0,05$); household income: ($B = 1,06 - 15,39, p < 0,05$); higher frequency of getting medical-related information ($B = 1,49 - 7,67, p < 0,05$) and the patient satisfaction with provider communication ($B = 1,26 - 15,24, p < 0,05$).

Conclusions: Results suggested three contents of HL that patients usually met with serious difficulties in the health care system and referred to taking specific actions that minimize risk for patients who may be affected to obtain optimal health outcomes. To help patients, physicians and health care providers are encouraged to modify their verbal and written communication to effectively communicate with patients of all HL levels. Besides, improving self-management and empowerment and progressing supportive systems are also important for promoting patients 's HL in their practice.

Keywords: health literacy, inpatient, patient satisfaction, Vietnam.

Session 4: Health literacy in NCDs

SS 4 KEYNOTE

Advocating dementia literacy in society: The stakeholders involved and the actions needed

Angela Y M Leung, PhD, MHA, BN, RN, FHKAN (Gerontology), FHKAN (Education and Research)

Vice President, AHLA

Director, Centre for Gerontological Nursing (CGN),

School of Nursing, The Hong Kong Polytechnic University

Dementia is the 6th leading cause of death in the world in 2016 and yet many people are uncertain about the symptoms, causes and prognosis of the illness. In the last decade, studies were carried out in Australia, Cambodia, China, Fiji, The Philippines and USA, soliciting the level of knowledge about dementia and attitudes towards persons with dementia among the general public. A wealth of evidence was obtained to show the insufficiency of dementia literacy in the societies. It is timely to consider and develop appropriate strategies to improve citizens' capacity to distinguish dementia from other mental illnesses or age-related cognitive decline, and be prepared to take care of family members with dementia. Stakeholders from different societal levels (persons with dementia, family caregivers, health service providers, policemen, security guard, and policy makers) should be involved in the relevant training. The proposed actions to support dementia are not solely grounded from individuals' needs but they should be made in consideration with the possible efforts from each member in the society. Dementia care is a stand-alone business but it should be designed and contributed by all societal members. As a conclusion, dementia literacy training should be shaped by everybody and provided to ALL.

SS 4

Health Literacy Intervention on Uncontrolled Hypertension Patients

Sawitree Visanuyothin, Chaweewon Boonshuyar, Samlee Plianbangchang, Mereerat Manwong

Social Medicine Department, Maharat Nakhon Ratchasima Hospital, 49, Changpeuk Road, Muang, Nakhon Ratchasima, Thailand 30170

Background: Uncontrolled HT is clearly a challenge. Many strategies have been used to address uncontrolled HT problem.

Objectives: This study aimed to determine health literacy intervention on uncontrolled HT in an urban community.

Method: The quasi-experiment was conducted during January 2017 - March 2018. Two urban areas were selected as sites for an experimental group and a control group, patients with uncontrolled HT were separately randomized within each group. The experimental group, consisting of 63 patients, received a health literacy intervention with picture book, clip VDO, two-day's workshop, support from village health

volunteer, and home visit by family nurses for six months. The control group, consisting of 60 patients, received usual care. Data were collected by questionnaire. Additionally, systolic home blood pressure (SHBP) and diastolic home blood pressure (DHBP) were measured for seven consecutive days at baseline, three months, and six months. Biochemistry levels were tested at baseline and six months. Data analysis used descriptive statistics, and the baseline comparison was analyzed using chi-square, Fisher's exact test, independent-t test, and Wilcoxon-Mann-Whitney test. Multiple linear regression was used to compare the mean difference in change of outcomes between the experimental and control groups, adjusting for confounders.

Results: Statistically significant changes ($P < .001$) were found between the experimental and control groups. The experimental group showed changes of -9.6 (95% CI: -14.0, -5.2) mmHg in SHBP, -6.2 (95% CI: -8.2, -4.0) mmHg in DHBP, -0.8 (95% CI: -1.2, -0.4) kg/m² in BMI, and -23.8 (95% CI: -34.2, -13.5) mg/dL in LDL.

Conclusions: The health literacy intervention effectively decreased blood pressure in patients with uncontrolled HT in an urban community.

Keywords: home blood pressure, primary care, program, community based.

SS 4

Knowledge, attitudes, practices on cervical cancer prevention and some related factors among women aged 18-60 in Thua Thien Hue province

Le Huy Tu Uyen, Dang Hoang Nhat Vi, Tran Quang Phuong Linh, Hoang Xuan Quynh, Nguyen Thanh Gia
College of Medicine and Pharmacy, Hue University

Background: Cervical cancer is one of the most common cancers in women around the world and is an important reproductive health problem in women. In recent years, the incidence and death of cervical cancer in Vietnam women is growing. However, there is little information available on the preventive behaviors against cervical cancer among women in Thua Thien Hue province, Vietnam.

Aims:

1. To investigate the knowledge, attitude, and practice (KAP) toward cervical cancer prevention among women aged 18-60 years in Thua Thien Hue province
2. To determine some factors related to the KAP about cervical cancer prevention among women

Methods: The study was designed as a cross-sectional investigation, in which 352 women aged between 18 and 60 were randomly sampled by the cluster sampling scheme. The data were collected using a structured questionnaire by face to face interview, in a rural and an urban area of Thua Thien Hue province. Factors related to the KAP was determined by using Chi-square test.

Result: Among the 352 participants, 78.7% of them had heard about cervical cancer. Most of them already knew at least one

risk factor (70.7%) and at least one symptom of the disease (67.9%). 72.2 % of women were aware that cervical cancer is preventable by HPV vaccine and 67.6% were willing to the disease screening. There was only 12.8% of women had been vaccinated against HPV and 47.2% of them had a gynecological check-up. Factors related to the KAP were education level, age, and marital status ($P < 0.05$).

Conclusion: Women in Thua Thien Hue had a high awareness of cervical cancer prevention, but their practice on cervical cancer screening was still low.

Keywords: cervical cancer prevention, Vietnam, HPV, vaccination

SS 4

Protocol on health literacy for management and control of hypertension: a participatory action intervention in a village of Chandigarh, India.

Reetu Passi 1, Manmeet kaur 1, Madhu Gupta 1, Savita Kumari 2

1. Department of Community Medicine and School of Public Health, Post Graduate Institute of Medical Education and Research, Chandigarh, India.

2. Department of Internal Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh, India.

Background: Health Literacy (HL) is a vast concept and can improve health outcomes of chronic conditions, like hypertension, which is on the rise in Indian populations. But interventions having long term relevance or sustainability to improve HL to maintain health have not been tried in India yet.

Aims: To develop and implement a participatory action based intervention to use and improve HL; and assess its effectiveness in building community's capacity for management and control of hypertension.

Methods: A 'concurrent mixed method' study, with quantitative and qualitative baseline survey, intervention and an end line survey, will be carried out in a purposively selected village of Chandigarh, India with sample size of 520 randomly selected adults. Through focus group discussions and in-depth interviews, intervention will be planned which will progress in three spirals of planning, action and reflection, including progress evaluation of each spiral. The concepts of HL like, information about hypertension, self management of disease, navigation of healthcare settings, communication with healthcare providers, social support, etc will be the basis of intervention. Community groups and volunteers will be identified who will plan and execute various HL improving activities in the village with the help of facilitator. Expected outcomes: The effect of participatory action intervention on change in health literacy of rural adult population regarding adherence to medication, routine follow ups, blood pressure, salt intake, obesity and other practices to manage and control HTN like smoking, alcohol and physical activity.

Conclusion: This research will assess the health needs of the

rural communities and develop a community based health literacy intervention to manage and control Hypertension. We inspire to build communities own capacities which can reduce their dependence on health sectors to manage their or their family's health conditions, thus resulting in improved outcomes of health.

Keywords: Health literacy, participatory action intervention, implementation, medication adherence

SS 4

Effects of Health Literacy Program with Social Media for Obesity Prevention Among Overweight Personnel in Health Promoting Center

Namuang 1, Banchonhattakit 2.

1. Health Promotion Center Region 7, Khon Kaen, Thailand

2. Faculty of Public Health, Khon Kaen University.

Background: According to the World Health Organization, fiscal year 2016, the adult population is over 1.9 billion people overweight and found that over 650 million obesity and more deaths from obesity. 39 percent of adults over the age of 18 are overweight in 2016 and 13 are obese. Most people in the world die from obesity more than underweight.

Objectives: This a quasi-experimental study aimed to assess the effects of health literacy program with social media for obesity prevention in overweight personnel in Health Promoting Center (HPC) in Thailand.

Method: The sample was randomized by multistage and inclusion criteria were set. An experimental group was overweight personnel in the 7th HPC, Khon Kaen province. A comparison group was overweight personnel in the 9th HPC, Nakhon Ratchasima. The experimental and the comparison groups were 35 volunteers per group. The experimental group received a health literacy program including lecture from the researcher, group discussion, knowledge and information via media and social media activities by close FACEBOOK. The control group received normally the health education information by health service staff. The duration of the program was 12 weeks. Comparative mean difference within group and between groups were analyzed by using paired t-test and independent t-test at 95% confidence interval.

Results: The results showed that, after the experiment, the experimental group had significantly mean scores of health literacy in term of accessibility, knowledge, communication, decision making, self- management, and literacy media about obesity prevention higher than before intervention and higher than the control group. (p -value <0.05). Especially, the mean scores of waist, body mass index, and body fat percentage of the experimental group had significantly lower than before the experiment and lower than the control group. (p -value <0.05).

Conclusion: So, this program could increase health literacy in overweight personnel in Health Promoting Center (HPC).

Keywords: Health literacy, Obesity prevention, Overweight, Social media

Session 6: Health Literacy in Nursing Practice

SS 6 KEYNOTE

THE QUALITY OF LIFE OF PATIENTS WITH PERMENENT COLOSTOMIES AFTER MILES SURGERY AND RELATED FACTORS AT VIET NAM NATIONAL CANCER HOSPITAL

1Dung Thi Phan, 2 Lan Thi Phong Nguyen, 3Khanh Phuc Pham
1Hanoi University of Business and Technology
2National Cancer Hospital
3Viet Duc University Hospital

Background: In Vietnam, care and treatment for ostomates have not been given adequate and intensive attention, leading to complications both psychologically and psychologically, affecting the quality of life of patients. The study was conducted to assess the quality of life of patients with permanent colostomies after Miles surgery at Vietnam National Cancer Hospital.

Methods: A cross-sectional descriptive study was conducted and interviewed patients with permanent colostomy using The Quality of Life-Ostomy Questionnaire (CoH-QoL-OQ)) to assess the quality of life from April 2018 to April 2019 at Vietnam National Cancer Hospital. Data were loaded into Epidata version 3.1 and analysed with SPSS version 18.0. **Results:** 55 patients with permanent colostomies (33 men and 22 women) were interviewed and showed: patients with low physical quality of life is 41.8%; low psychological is 29.1%; low socially is 9.1%; low spiritual welfare is 0%. Research has not found the relationship between quality of life and other factors.

Conclusion: The quality of life of patients who have permanent colostomies after Miles surgery is low, and have not found a relationship between quality of life and other factors.

Key words: *colostomy, quality of life, Miles procedure.*

SS 6

NURSES' WORKING ENGAGEMENT AT GENERAL HOSPITAL OF AGRICULTURE

1TRANG LE THI, 2TUYET MINH LUU, 3DUNG PHAN THI
1 Danang University of Medical Technology and Pharmacy
Mobiphone: 0975841133
Email: Letrangyte2@gmail.com
2 Ha Noi Medical University
3 Hanoi University of Business and Technology.

Background: In the current stage of development, there are many changes in the management mechanism and the role of nursing in patient care. Work engagement is a positive, fulfilling, affective motivational state of work-related wellbeing. Engagement is characterized by vigor, dedication, and absorption. The results of work engagement are higher personal initiative, inspire colleagues, reducing the rate of hospital errors and increasing financial income for health facilities. Research on work engagement to find out the factors that need to be considered to improve the working efficiency of Nursing. This study was conducted at General hospital of Agriculture, where facilities are growing strongly, requiring consistent development of human resources. **Objective:** describe nurses' working engagement and related factors at General hospital of Agriculture. **Method:** A cross-sectional study conducted on 178 nurses at General hospital of Agriculture, used a short version of Utrecht Work Engagement Scale (UWES-9). The questionnaire consisted of demographic and working

characteristics, effort and remuneration, authentic leadership. **Results:** The UWES-9 score was $4,01 \pm 0,74$. The gender, job position, relationship with manager and colleagues, authentic of the leaders were related factors of the nurses' work engagement.

Keywords: Work engagement, nursing, General Hospital of Agriculture, Utrecht Work Engagement Scale-9 (UWES-9)

SS 6

ASSESSING SYMPTOM DISTRESS AMONG PATIENTS WITH BRONCHOPULMONARY CANCER TREATED AT THAI NGUYEN ONCOLOGY CENTER

Nguyễn Đức Thành¹, Lương Thị Thoa², Hoàng Thị Thùy Linh³, Nguyễn Công Hoàng⁴, Nguyễn Phương Minh⁵

Objective: Surveying status in symptom distress of patients with bronchopulmonary cancer treated at Thai Nguyen Oncology Center from Jan, 2017 to Jun, 2017. **Method:** Using a descriptive cross-sectional study on 45 patients with newly treatment, they were interviewed directly through two questionnaires on ESAS (Edmonton Symptom Assessment System) and EORTC QLQ-LC13. **Results:** average age is 62,9 (43-84 years old), the ratio of males to females is 4/1; there were 28 patients with stage IV cancer and 30 palliative care patients. The average scores on function and single symptoms according to ESAS are significantly improved after treatment. Score of symptoms according to LC13 also was a meaningful difference.

Key words: symptom distress, bronchopulmonary cancer, Thai Nguyen Oncology

1Ths.ĐD, Điều Dưỡng Trưởng Khoa Khám Bệnh, Bệnh viện Trung ương Thái Nguyên, tel: 0986527484, email: thanhnguyenduc.ubtn@gmail.com

2Điều Dưỡng Trưởng Khoa GMHS, Bệnh viện Trung ương Thái Nguyên

3Phó Trưởng Phòng Điều Dưỡng-Bệnh viện Trung ương Thái Nguyên

4Giám Đốc Bệnh Viện- Bệnh viện Trung ương Thái Nguyên

5Bộ Môn Điều Dưỡng-Trường Cao Đẳng Y Tế Thái Nguyên

SS 6

QUALITY OF LIFE AND RELATED FACTORS ON PATIENTS WITH DEEP VEIN THROMBOSIS

Nguyen Thi Thanh Truc

Thoracic – Vascular Surgery Department, University Medical Center

Background

Deep vein thrombosis (DVT) is the illness with an annual fatality rate that are greater than that of AIDS, Breast Cancer and Traffic Accident combine (Rathbun, 2009). The Quality of life (QoL) of patients with DVT decline drastically. DVT affects patients in daily life aspect: Commuting, housework etc... Determine the factors that impact QoL could help to provide more information during treatment process to clinical doctors.

Aims

This study to diversify the knowledge and improve of QoL in DVT patients.

Methods

This is the cross-section design to determine the QoL score of the DVT patients with 70 patients who diagnosed with DVT in Thoracic-

Vascular Surgery Department, UMC hospital from 2016 to 2019 with the convenience sampling method. The study progress include: Training colleagues on data collecting, pilot study, data analyzing; make use of the SF-36 scoring method to evaluate the general QoL score and other QoL subcategories. Data collected will be upload and analyzed using Stata version 14.0

Results: General QoL mean score among DVT patients who have received treatment at UMC hospital is 65.2 with a standard deviation (SD) of 25.5. Mental health subgroup component QoL mean score is 72.4 (SD 24.8) higher than Physical health subgroup component QoL mean score with only 60.5 (SD 26.7). Factors proved that associated with components QoL mean score including: BMI, cast in plaster/recent leg injury. We also find negative linear correlation between age and QoL components mean score, which means the higher age lead to the decrease of QoL ($p < 0.001$). Finally, we also found a trend that patients who PE risk score at high level have lower QoL means core than the control group.

Conclusion:

DVT patients have an average mean score of health related QoL. We found factors statistic significant associated with QoL including: age, BMI, cast in plaster/recent leg injury, PE risk score ($p < 0.05$). This finding suggest that nurse could play a bigger role such as: PE risk score evaluating, nutrition diet consultation, health risk behavior assessment during treatment procedure. Those would help to improve QoL score of DVT patients.

Keywords: Deep venous thrombosis, quality of life, SF-36

SS 6

ASSESSING SYMPTOM DISTRESS AMONG PATIENTS WITH BRONCHOPULMONARY CANCER TREATED AT THAI NGUYEN ONCOLOGY CENTER

Thanh Duc Nguyen¹, Minh Phuong Nguyen, Hoang Nguyen Cong, Thoa Luong Thi, Bao Ngoc Tran.

1.MNS, Department of oncology center, section of palliative care, Thai Nguyen National Hospital.

Contact information of presenting author

Thanh Duc Nguyen-0912929814-
thanhnguyenduc.ubtn@gmail.com

Background: Patients with early stage lung cancer seldom present initial symptoms distress, causing a delayed diagnosis and decrease quality of life. **Aims:** This study aimed to investigate Evaluating symptoms distress in lung cancer patients undergoing chemotherapy at Thai Nguyen National Hospital. Method: Using a descriptive cross-sectional study on 45 patients with newly treatment, they were interviewed directly through two questionnaires on ESAS(Edmonton Symptom Assessment System) and EORTC QLQ-LC13. **Method:** Using a descriptive cross-sectional study on 45 patients with newly treatment, they were interviewed directly through two questionnaires on ESAS(Edmonton Symptom Assessment System) and EORTC QLQ-LC13. **Results:** average age is 62,9 (43-84 years old), the ratio of males to females is 4/1; there were 28 patients with stage IV cancer and 30 palliative care patients. The average scores on function and single symptoms according to ESAS are significantly improved after treatment. Score of symptoms according to LC13 also was a meaningful difference. **Conclusion:** Presenting initial symptom distress was the common cause for medical consultation in lung cancer

patients undergoing chemotherapy.

Key words: symptom distress, bronchopulmonary cancer, Thai Nguyen Oncology

SS 6

ADHERENCE OF TREATMENT AND QUALITY OF LIFE OF CHRONIC GOUTY PATIENTS IN RHEUMATOLOGY DEPARTMENT, E HOSPITAL FROM 01-04/2019

1 Thi Thao NguyenA, Thi Thao NguyenB , Phuong Anh Doan, Nam Chung Tran, Hong Hoa Dang, Thi Hong Hanh Tran and partner
2 Thi-Ngoc Do

1 Rheumatology department, E hospital, Hanoi, Vietnam
2 Nursing department, E hospital, Hanoi, Vietnam

Gout is one chronic disease, adherence is a challenge. This study was conducted with 61 patients for chronic gout treatment at Rheumatology department, E hospital from 01-04/2019. **Purposes:** assessment of adherence of chronic gouty patients in treatment and its related factors: life style, doing exercises, quality of life with SF-36 score. **Methods:** this study is a cross-sectional, prospective trial. Data was collected from face to face interviews with questions on the frequency of taking medicines, dietary intake, doing exercises, following up those were recommended for chronic gouty patients and also their quality of life with SF-36 score. **The Results:** age mean 62 ± 12 (34-86 years), male 95.1% female 4.9%. BMI score mean: $23,1 \pm 2,7$. The adherence among this group of patients in taking medicine, doing exercises, following up was under 1/3 (29.5%). Almost patients (86.9%) have level of quality of life which are in low or medium level (23% và 63,9%). Statistically significant association was found between the level of the sense of coherence and the patients' level of the quality of life ($p < 0.05$).

Keywords: Chronic gouty patient, quality of life, adherence.

SS 6

An initial assessment of the level of awareness and participation of doctors and nurses with patients in the Health promoting hospital activities in E hospital, 2013.

Ngoc Thi Do¹, Anh Nguyet Do³, Ha Thu Le²

Do Thi Ngoc, Register nurse, Master Hospital Management; Do Nguyet Anh, Medical doctor. Le Thu Ha, Medical doctor, Master Public of Health. E Hospital, Hanoi, Vietnam

Contact information of presenting author

Do Thi Ngoc – 0983041068-dothingocbve@gmail.com

Background: In 1986, World Health Organization has developed the "Health Promotion Hospital" project. In 2014, there are over 700 hospitals, 36 countries from Europe and Asia are being member of the project. Health promoting hospital is not only focus the goal of treatment but also join the prevention of disease and health promotion for the patients and the health care worker. Robert Beaglehole et al on *Public health in the new era show that:* each year around 6.3 million people aged under 70 die of cardiovascular disease, 5.6 million people of all ages die of HIV, TB and malaria. In Vietnam the non-contagious disease group and accidents and injuries are increasing fast. The E hospital is General E Hospital, it belong to Ministry of Health has a high rate of patients with chronic disease. In 2006 the E hospital participated in WHO's health promotion network.

Aims: Assessing the awareness and participation of health promoting hospital activities of patients and medical staffs in E hospital. Identify area for further improvement and make recommendations.

Methods: A cross-sectional survey design was used including 370 in-patients in the 16 departments and 147 doctors, nurses in the E hospital, 2013. The questionnaires were developed based partly on the WHO guideline. The data was analysed using SPSS16.0, used frequencies variables and chi-squared to describe demographic characteristics of participants and find statistical significant difference.

Results: The health education activities have been added to the regular tasks, 85% of medical staffs had trained for patients in health education sessions. Health education for the patients is the main stream in Health promotion. More than 81,6% of inpatients were instructed to use medication, most of them (81%) can do right at home. But the chronic patients performed right care by themselves at home had just 32%. After being advised the risk of smoking that 28.9 % of patients give up smoking, the statistical evidence was significant. The large number of chronic patients with hypertension, diabetes, kidney failure, hepatitis do not have sufficient base knowledge to take care by themselves at home.

Conclusions: Health Promotion is very important responsibility of nursing care in hospital. Majority of patients have participated and received health promotion information and positive impact have been achieved. We need to find out how to enhance competency of nurses on this area. Furthermore, the chronic patients should be improved the capacity to extend their scope of health care management. It is very important to have health care network that has connected from medical expert in Hospital with primary health care in community.

Key words: Health promotion, education, patient, doctor and nurse, satisfaction.

SS 6

ASSESSMENT THE KNOWLEDGE, ATTITUDE AND PRACTICE ON OSTOMATES AT HOSPITAL IN SOUTHERN VIETNAM.

Vo Thi Thanh Tuyen

Gastrointestinal Surgery Department, University Medical Center

Contact information of presenting author

Vo Thi Thanh Tuyen-0989776274- tuyen.vtt@umc.edu.vn

Background

Stoma are usually used for the elderly after colorectal cancer surgery at the late step. The right stoma location selection that can prevent peristomal skin complications which may increase treatment costs and duration hospitalization. Patient stoma self-management requires the appropriate knowledge, attitudes and practices.

Aims

The purposes of this study is to assess and find out the relationship between the knowledge, attitudes and practices of stoma patients at a hospital in Southern Vietnam.

Methods

This is a cross-sectional study with 118 patients who have the stoma. The questionnaire was created based on the research of Le Thi Hoan. The validation and the trust of the questionnaire were consulted by the experts of colorectal cancer. There was 29 questions about the knowledge, 6 questions about attitude and 17 steps to survey ostomates. The research data was analyzed by the SPSS 17.0 software.

Results

The correct knowledge, attitudes and practices of stoma patients who could take care themselves were 26.3% (31/118 cases), 28.8% (34/118 cases) and 16.1% (respectively). No significant difference between the knowledge, attitudes and practices was found ($p>0.05$). Evaluate the influence of the demographic features, the research's result points out that the influence of these features on the knowledge, attitudes and practices of the artificial anus self-care doesn't have any statistical meaning ($p>0.05$)

Conclusion

Although this research hasn't found the relationship between the knowledge, attitudes and practices of the stoma self-care yet, the proportion of the patients who have the knowledge, attitudes and practices of the stoma self-care which is low proves that the medical staff haven't consult and deliver the health education effectively. This means that the hospital needs to have the strategy in order to reinforce the guidance for the patients with the stoma to help them understand and practice in a right way in the future to prevent the complications and help them to reintegrate the social life well.

Key words: Patient, Colostomy; self-care colostomy

SS 6

CURRENT SITUATION AND SOME FACTORS RELATED TO HPV PREVENTION KNOWLEDGE AMONG WOMEN AGED 15-49 IN BINH DINH PROVINCE, 2017

Nguyen Thi Nhu Tu¹ *, Tran Thi Xuan Tam²

¹ Binh Dinh Health Department

³ Binh Dinh Provincial General Hospital

Nguyen Thi Nhu Tu, Deputy Head of Medical Department, Department of Health, Binh Dinh Province

Address: N0 756 Tran Hung Dao, Quy Nhon, Binh Dinh Province, Vietnam

Contact information of presenting author

Nguyen Thi Nhu Tu – 0987069369-nhutu66@gmail.com

Cervical cancer prevention and HPV testing & vaccination health literacy-Worldwide perspectives

The project to deploy the HPV Vaccination Programs for girls in Vietnam, showed that the reasons why their children were not vaccinated or inadequate vaccinating of three shots was due to a lack of awareness of the vaccination program.

Objectives: To describe the current situation of HPV prevention knowledge among women aged 15-49 in Binh Dinh province and identify some factors related to HPV prevention knowledge of these women. **Methods:** The study conducted on 1200 women aged 15-49 years in Binh Dinh province. The design was the cross-sectional descriptive study using structured interview questionnaires. **Results:** Knowledge about HPV prevention of women ranked low at 15.2%. Women who had access to 1, 2, 3 or over 3 sources of information were at higher levels of 2.4 times; 5 times; 3 times and 8.2 times more than women who did not have access to any information sources, the difference was statistically significant ($p<0.05$). There was an association between ethnicity, living place, marital status, education, occupations and households economy with knowledge of women aged 15-49 years on HPV prevention knowledge from 2.5 to 5 times. The differences were statistically significant ($p<0.05$); The relationship between age groups and HPV prevention knowledge of women had not been found ($p>0.05$).

Conclusions: There was lack of knowledge about HPV

prevention among women aged 15-49 years in Binh Dinh province (84.8%), especially ethnic women, farming and rural groups, married, low education and economical conditions. Women who accessed at least two types of communication had knowledge 3 to 8.2 times more the others.

Keywords: *Knowledge, communication, prevention of HPV, related factors*

SS 6

THE QUALITY OF LIFE OF PATIENTS WITH PERMENENT COLOSTOMIES AFTER MILES SURGERY AND RELATED FACTORS AT VIET NAM NATIONAL CANCER HOSPITAL

1Dung Thi Phan, 2 Lan Thị Phong Nguyen, 3Khanh Phuc Pham

1Hanoi University of Business and Technology

2National Cancer Hospital

3Viet Duc University Hospital

Dung Thị Phan, Deputy dean of the Faculty of Nursing, Hanoi University of Business and Technology Address: 29 A, 124 Vinh Tuy, Hai Ba Trung, Hanoi, Vietnam

Contact information of presenting author

Dung Thi Phan - 0972612888 - phanthidzungvd@gmail.com

Background: In Vietnam, care and treatment for ostomates have not been given adequate and intensive attention, leading to complications both psychologically and psychologically, affecting the quality of life of patients. The study was conducted to assess the quality of life of patients with permanent colostomies after Miles surgery at Vietnam National Cancer Hospital.

Methods: A cross-sectional descriptive study was conducted and interviewed patients with permanent colostomy using The Quality of Life-Ostomy Questionnaire (CoH-QoL-OQ)) to assess the quality of life from April 2018 to April 2019 at Vietnam National Cancer Hospital. Data were loaded into Epidata version 3.1 and analysed with SPSS version 18.0.

Results: 55 patients with permanent colostomies (33 men and 22 women) were interviewed and showed: patients with low physical quality of life is 41.8%; low psychological is 29.1%; low socially is 9.1%; low spiritual welfare is 0%. Research has not found the relationship between quality of life and other factors.

Conclusion: The quality of life of patients who have permanent colostomies after Miles surgery is low, and have not found a relationship between quality of life and other factors.

Key words: *colostomy, quality of life, Miles procedure.*

SS 6

FACTORS RELATED TO QUALITY OF LIFE OF PATIENTS WITH ADVANCED CANCER

DIỆP THỊ TIỂU MAI

Address: 99 Hung Vuong Street, Hai Chau District, Da Nang, Vietnam

Email: dieptieumai@gmail.com

Mobile phone: 0869827503

Background: Quality of life (QOL) is a crucial factor in cancer treatment outcomes. Acknowledgment on factors related to QOL is necessary to tailor suitable interventions to improve QOL and efficacy on cancer treatment and care.

Aims: This study aimed to describe the QOL of patients with advanced cancer and explore the factors related to the QOL of patients with advanced cancer.

Methods: A cross-sectional study was conducted on 120 patients with advanced cancer treated at Da Nang Oncology Hospital, Vietnam. The QOL was measured using the Functional Assessment of Cancer Therapy-General (FACT-G). T-Test, ANOVA, and Pearson's product-moment correlations were used to analyze the data.

Results: The FACT-G mean score was $55,43 \pm 9,64$. The mean scores of physical wellbeing, family/social wellbeing, emotional wellbeing, and functional wellbeing were at 12.73 (SD=5.04), 18.33 (SD=4.09), 9.94 (SD=4.87), and 14.24 (SD=6.43), respectively. Gender, individual income, time since diagnosis, cancer stage, and pain had a significant correlation with the quality of life.

Conclusion: Patients with advanced cancer had poor QOL, especially emotional wellbeing. Nurses and healthcare professionals should pay attention to the QOL of patients with advanced cancer. Nursing interventions should be developed base on the characteristics of patients and disease to improve the QOL.

Keywords: *Quality of life, Patients with advanced cancer, Oncology, FACT-G.*

SS 6

A SURVEY ON THE KNOWLEDGE AND ATTITUDES OF MEDICAL STAFF TOWARD MEDICAL INCIDENTS REPORTING IN QUANG NINH OBSTETRICS & PEDIATRICS HOSPITAL IN 2018

1 Le Thi Thuy Trang, 1Ngo Thi Mai Huong, 1Le Thuy Huong, 1Pham Ngoc Thanh.

1 Quang Ninh Obstetrics And Pediatrics Hospital.

Le Thi Thuy Trang Nursing room - Quang Ninh Obstetrics And Pediatrics Hospital Address: Dai yen Ward, Hạ Long City, Quang Ninh Province

Le Thi Thuy Trang – 0853.301.688- thuytrangbvsn@gmail.com

Objectives: A survey on the knowledge of medical staff toward medical incidents reporting to improve and advanced the quality of medical incident reporting.

Methods: Descriptive study, quantitative and qualitative combination.

Results: In the classification of the level of influence on patients of medical incidents, 3.5% know how much to classify the degree of impact on patients and 45.7% know the list of medical incidents that need reporting.

The incidents obligated to report: staff correctly responding to incidents that are obligated to report are the wrong surgery positioned on patients (98.8%); oxygen tank explosion and gas tank explosion (75.5%); wrong surgery method on patients (96%); omitting tools, gauze in patients bodies (98.8%) and people fell during hospitalization (67.1%). The correct general knowledge of doctors about medical incident reporting (10.53%); nursing (11.39%); other objects (18.92%). The attitude of medical staff on reporting medical incidents: reports help avoid repeating the same incident (97.7%); reports help improve treatment and care for patients (97.2%) and none of medical staff agree to report the incident without changing anything; incident reports are time consuming (only 0.6%). The frequency of medical incidents reported by medical staff has 53.18% never reported. Some of factors affecting the implementation of medical incident

reports such as lack of feedback from the Quality Management Department (40.5%); no training about method and the incident reporting procedure (35.8%) and anxiety is disciplined (54.9%).

Conclusions: Results of the study "A Survey on the knowledge of medical staff toward medical incidents reporting" helps medical staff to have awareness, positive attitudes about medical incidents reporting then it may decrease medical incident rate in the hospital.

Keywords: *Medical incidents.*

SS 6

A STUDY OF MANAGEMENT COMPETENCY ON CHIEF NURSES

Truong Hoai Nam¹, Li-Min Lin²

¹ Kien Giang General Hospital

² Associate Professor Nursing Department – Meiho University – Taiwan

Background: Ministry of Health and Vietnam Nursing Association have many programs to foster, improve capacity for the head nurses but not many actual results could bring significant changes. To gain changes, the hospital leaders should be aware of the roles, functions of the chief nurses of the departments. Nursing activities require the nurses to have knowledge in their specialty, good skills and professional ethic. Therefore, there is a need to evaluate the necessary management activities and their associated skills of chief nurse at Kien Giang General Hospital.

Method: An empirical study of chief nurses competencies was conducted via a questionnaire from March of 2018 to April of 2018. The study method is cross sectional study in order to survey necessary activities (A1-A20) and skills (S1-10) of current management tasks of chief nurses. The questionnaire contains three parts: basis data, managerial skills, and management activities and the needed skills.

Results : The rate of chief nurses at vocational level is 31.4%, and those who have university graduated level are 48.6%. The perception of importance the five most importance management activities for the chief nurse include are: 1) Manage environment safety and medicine (A6), 2) Make plan and human resource management (A3), 3) Management of quality of nursing products (A7), 4) Make plan (A1), and 5) Make working plan and tasks allocation (A9).

Among the 10 managerial activities and skill competencies, the results shown that Computer skills (S10), Communication skills (S6), Monitoring & controlling skills (S5), Learning & adaption skills (S7) are the most widely required skills in terms of the frequency of cited. Conversely, Study and creativity skills (S2) and Fluency in many languages (S9) were ranked the least important. The results indicate that the skill, Fluency in many languages, is not important to any management activities.

Conclusions: The results from this study have several implications for practitioners. The management development needs of individual nursing managers became clear, while the gaps in management development processes for filling potential vacancies became more evident. Programs developed to account for these gaps helped the hospital develop a pool of qualified candidates for succession purposes. They also can serve as guideline for recruiting the right nursing managers.

Keywords: Chief nurse, Nursing competency, nursing management activity, nursing skill.

SS 6

Factors Related to Innovation Behavior Among Nurses in

Tertiary General Hospitals, the Central Region, The Socialist Republic of Vietnam

Mr. Le Van Tung; Assistant Professor Dr. Thitinut Akkadechanunt
Master of Nursing Science (Nursing Administration)

Innovation behavior among nurses is essential for improving quality health care. The purpose of this study were to explore innovation behavior, proactivity, and creative efficacy, and to explore the relationship between proactivity and innovation behavior among nurses, and the relationship between creative efficacy and innovation behavior among nurses, in tertiary general hospitals in the central region of the Socialist Republic of Vietnam. Subjects included 384 nurses selected from medical, surgical, pediatric, outpatient department, intensive care unit, and specialized units in three tertiary general hospitals by stratified random sampling. Research instruments were a Demographic Data Form, a Proactivity Scale, a Creative Efficacy Scale, and an Innovation Behavior Scale. The validity of these instruments was confirmed by experts. The reliability of the proactivity scale, the creative efficacy scale and the innovation behavior scale were 0.89, 0.83, and 0.80 respectively. Data were analyzed using descriptive statistics and the Spearman's rank-order coefficient.

The results of the study are as follows:

1. The level of overall proactivity among nurses in the three tertiary general hospitals was at a moderate level.
2. The level of overall creative efficacy among nurses in the three tertiary general hospitals was at a low level.
3. The level of overall innovation behavior among nurses in the tertiary general hospitals was at a low level.
4. There was a significant positive relationship between proactivity and innovation behavior among nurses.
5. There was a significant positive relationship between creative efficacy and innovation behavior among nurses.

Nursing administrators can use the results of this study to develop strategies to improve creative efficacy and proactivity among nurses in order to encourage innovation behavior among nurses in tertiary general hospitals.

SS 6

THE QUALITY OF LIFE OF PATIENTS WITH PERMANENT COLOSTOMIES AFTER MILES SURGERY AND RELATED FACTORS AT VIET NAM NATIONAL CANCER HOSPITAL

1Dung Thi Phan, 2 Lan Thị Phong Nguyen, 3Khanh Phuc Pham

1Hanoi University of Business and Technology

2National Cancer Hospital

3Viet Duc University Hospital

Dung Thị Phan, Deputy dean of the Faculty of Nursing, Hanoi University of Business and Technology Address: 29 A, 124 Vinh Tuy, Hai Ba Trung, Hanoi, Vietnam

Contact information of presenting author

Dung Thi Phan - 0972612888 - phanthidzungvd@gmail.com

Background: In Vietnam, care and treatment for ostomates have not been given adequate and intensive attention, leading to complications both psychologically and psychologically, affecting the quality of life of patients. The study was conducted to assess the quality of life of patients with permanent colostomies after Miles surgery at Vietnam National Cancer Hospital.

Methods: A cross-sectional descriptive study was conducted and interviewed patients with permanent colostomy using The Quality of Life-Ostomy Questionnaire (CoH-QoL-OQ) to assess the quality of life from April 2018 to April 2019 at

Vietnam National Cancer Hospital. Data were loaded into Epidata version 3.1 and analysed with SPSS version 18.0. **Results:** 55 patients with permanent colostomies (33 men and 22 women) were interviewed and showed: patients with low physical quality of life is 41.8%; low psychological is 29.1%; low socially is 9.1%; low spiritual welfare is 0%. Research has not found the relationship between quality of life and other factors.

Conclusion: The quality of life of patients who have permanent colostomies after Miles surgery is low, and have not found a relationship between quality of life and other factors.

Key words: *colostomy, quality of life, Miles procedure.*

Session 7: Health literacy in health services, delivery, outcomes

SS 7 KEYNOTE

Global health literacy plans and actions by the governments

Peter Chang¹, Kristine Sorensen²

¹Taiwan Association for Health Literacy and Communication; International Health Literacy Association; Chung-Shan Medical University (Taiwan; peter.chang3@gmail.com)

² Global Health Literacy Academy; International Health Literacy Association (Denmark; contact@globalhealthliteracyacademy.org)

Health literacy has been of great attention to many professionals and academics, and shown to play more significant roles in healthcare organizations. However, there have been great variations in the degrees of attentions and supports as well as the approaches by the governments around the world. The study aims to identify and compare the governmental actions and achievements in a global scale and to provide the comparisons in between.

A survey to understand the extent of illiteracy among American youths as assessed by a test specially constructed as part of the Health Examination Survey during 1966-70 was one of the earliest health literacy study by the Department of Health and Human Services in the USA (1). Later in 2003, the 2003 National Assessment of Adult Literacy (NAAL) was the first large-scale national assessment in the United States to contain a component designed specifically to measure health literacy - the ability to use literacy skills to read and understand written health-related information encountered in everyday life. The NAAL health literacy component also established a baseline against which to measure progress in health literacy in future assessments (2). In Europe, the **England** National Health Service (NHS) concluded in its survey that between 43% and 61% of English working age adults routinely do not understand health information and a financial cost of 3% to 5% of the annual UK health budget. It addressed the importance of improving population health literacy, together with increasing system and practitioner awareness of the challenges faced by people with lower levels of health literacy, was an absolutely vital precursor to achieving in its chapter two of the "Five Year Forward View", and the emerging Supported Self Care program in particular (3). In one of the champions for health literacy in Europe, The **Netherlands** by its Legislation Patient rights laid down in legislation on informed consent, which obliged health care providers to provide proper understandable information and to get the patient's approval before treatment. In 2011, Netherlands' National Health Council produced an advice for the Minister of Health with regard to tackling low literacy in the health sector, which the minister promised to implement. This was to further strengthen the position

of vulnerable patients and their legal right with regard to informed consent. The Ministry of Health supported the health literacy activities as part of equity in health approach, but leaves actual implementation to the stakeholders in the field (4). Many other countries in Europe also addressed the issues in the governmental levels actively, including Denmark (5) and Germany (6), the later, recently, was under the patronage of the Federal Ministry of Health with funding from the Robert Bosch Foundation and the Federal Association of the AOK and launched in 2018 as the National Action Plan Health Literacy (7).

In Europe in general, a report "Study on sound evidence for a better understanding of health literacy in the European Union" provided an update on the general overview of the efforts by the Europe Union member States (8), that "in most countries health literacy is just starting being addressed through policies or activities". On the other hands, challenges were addressed "though health literacy is on the agenda in most of the EU Member States, in many countries the efforts are not coordinated through a policy at the most appropriate level". "A more programmatic and evidence-based policy to health literacy in individual EU Member States and further exchanges of knowledge and best-practices at EU level could be beneficial with regard to the outcomes of these efforts" are recommended. However, Europe has taken the lead in addressing the issue, evidenced by the serious works of the World Health Organization Europe, in the works of "Health literacy, the Solid Facts" (9) and recently "Investing in health literacy POLICY BRIEF 19 What do we know about the co-benefits to the education sector of actions targeted at children and young people?" (10).

On the other hands, **Australia** has taken more serious and solid steps in addressing health literacy in its national program (Chapter 4.3) "Health literacy can influence how much and how effectively people do this. It has two major components (ACSQHC 2014a): Individual health literacy is about a person's ability to access, understand and apply health information; for example, to complete health care forms or navigate the health care system, and the health literacy environment describes the infrastructure, people, policies and relationships of the health care system. Aspects of the health literacy environment include patient referral pathways, coordination of care, and hospital design". There are also Initiatives to improve health literacy addressed by the "Commission and Healthdirect Australia", which developed 'Question builder', an online tool for patients to prepare for a medical appointment, and allowed patients to select questions they want to ask at the appointment and prepare for questions the doctor may ask them. The Commission also released 'Top tips for safe health care', a booklet that provides information about what people should consider when interacting with the health system, such as finding good information, asking about care after leaving hospital and giving feedback (11, 12). Another active player in Asia **Taiwan** has demonstrated significant interest in health literacy researches and practices in the past few years. The governmental body Health Promotion Administration in the Ministry of Health and Welfare also positively supported as a powerhouse of various health literacy programs: "approximately 51.6% of adults have insufficient and limited health literacy; 30% to 50% of adults have difficulty in mastering health information", and has "put the promotion of health literacy in people as an important national policy, established a health literacy integration resource center, planned to accomplish the national action plan in the end of 2019, and built a supportive environment to strengthen the skills of health service providers as well as develop guidelines of friendliness health literacy materials"(13). **Thailand** government was also demonstrated as one of the champions in South East Asia (**SEARO**)

for health literacy in national program since early 2000. The ThaiHealth also made efforts in the “establishment of the QLF by ThaiHealth as a stand-alone statutory agency” as “a strong and practical systematic engagement with education as one of the major social determinants of health”. As addressed “The QLF is addressing health literacy, but even more directly relating to a key social determinant of health,..”(14). The **Philippines** is another new head up to its national program initiated by the Philippine Statistics Authority (PSA) which approved National Health Literacy Survey (NHLS), as a project of the Health Promotion and Communication Service of the Department of Health (DOH) in cooperation with the Philippine Council for Health Research and Development in late 2018 (PCHRD; 15). Another active player in health literacy would set **Israel** one of the best examples. Israel with its high literacy rates, with its 2020 developmental goals including health literacy (16), as well as aims in its hospitals.

The survey study in health literacy will continue to collect, analyze, and compare the governmental plans and actions across the globe and to illustrate better practices and policies in perspectives by the governments around the world. The details will be provided in the 7th AHLA Conference and updated in future manuscripts.

*no conflict of interest declared.

References

- (1) Vital Health Stat 11. 1973, 131:1-35.
- (2) Orthop Nurs. 2009; 28(1): 27–34.
- (3) <https://www.england.nhs.uk/blog/jonathan-berry/>
- (4) https://www.kootphc.nl/English/areas-of-work/health_literacy_in_the.pdf
- (5) <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-1095>
- (6) <https://www.healio.com/public-health/journals/hlrp/2018-4-2-2/%7Bc8945e4e-788a-40be-a810-8547e52eeb60%7D/health-literacy-and-health-service-use-in-germany>
- (7) <https://www.hertie-school.org/en/gesundheitskompetenz/>
- (8) https://ec.europa.eu/health/sites/health/files/health_policies/docs/2015_health_literacy_en.pdf
- (9) http://www.euro.who.int/_data/assets/pdf_file/0008/190655/e96854.pdf
- (10) http://www.euro.who.int/_data/assets/pdf_file/0006/315852/Policy-Brief-19-Investing-health-literacy.pdf
- (11) <https://www.aihw.gov.au/getmedia/3e23af2f-e71f-443f-ad9b-8eac957aa1e3/aihw-aus-221-chapter-4-3.pdf.aspx>.
- (12) Top tips for safe health care. Sydney: ACSQHC. Viewed 18 December 2017.
- (13) <https://www.hpa.gov.tw/EngPages/Detail.aspx?nodeid=1074&pid=10535>
- (14) http://www.searo.who.int/entity/healthpromotion/10year-review-thai_health_promotion_foundation.pdf?ua=1
- (15) <https://psa.gov.ph/content/psa-grants-clearance-national-health-literacy-survey>
- (16) <https://www.ncbi.nlm.nih.gov/books/NBK202438/>

SS 7 KEYNOTE

Health Literacy and Universal Health Care

Paras K. Pokharel

Email : paras.pokharel@bпкиhs.edu

Sex: Male

Professor

School of Public Health & Community Medicine,
B P Koirala Institute of Health Sciences,
Dharan, Nepal. (www.bпкиhs.edu)

With the changing dynamics of the public health problems that we face, it is felt that these challenges & demands coordinated action. The sustainable development goals are interconnected and are shared responsibilities between every sectors in society.

As the Universal health coverage (goal number 3.8) is being aspired and strived for by the countries, it is equally important to focus on social determinants of health, health policies and health literacy. While we keep on discussing on health policies and social determinants, there is lack of discussion at national levels on the challenges of health literacy approach for implementing UHC, about using health literacy to solve problems, appropriate tools and strategies of health literacy and many pertinent issues where health literacy approach can actually make good impact.

In such a backdrop, discussion and focus on how countries can remove the barriers to health literacy and eventually leap forward to attain Universal Health Coverage is imperative. The overview of the areas where health literacy work across different settings and examples from Nepal will be discussed.

SS 7

Nurses' Knowledge of and Experience with Health Literacy in Clinical Practice: A Meta-Ethnography

Adwoa O. Koduah , Angela Y.M Leung, Justina Y.W. Liu
Centre for Gerontological Nursing, School of Nursing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China.

Background: Health Literacy is a significant predictor of overall health outcomes. Studies show that a significant proportion of health professionals have limited knowledge and experience about health literacy despite its critical role in healthcare delivery.

Objectives: This review aims to explore nurses' knowledge of, experiences and challenges in applying health literacy in clinical practice.

Methods: A literature search was carried out in the CINAHL, MEDLINE, PubMed, ProQuest Dissertation and Theses, British Nursing Index, Science Direct, PsycInfo with no restriction on publication date. Using Noblit and Hare's meta-ethnography method, the papers were reviewed through thematic synthesis techniques of reciprocal and refutational investigation. The Critical Appraisal Skills Programme checklist was used to appraise the quality of the papers. Ten papers were included in the synthesis.

Results: Two main themes were derived: a) Health literacy: a familiar concept, yet unfamiliar term and b) barriers faced in promoting adequate health literacy. There was evidence of unfamiliarity and limited understanding of health literacy. The extent of nurses' examination of patients' health literacy and deliberate application of health literacy techniques in clinical practices was unsatisfactory. A combination of individual, institutional, provider-related and societal/cultural factors was commonly presented as impediments to nurses' ability to adapt and enhance patients' health literacy.

Conclusion: This study has outlined the issues in relation to

nurses' knowledge of and ability to address low health literacy issues in practice. The situation demands collaborative efforts to enhance nurses' awareness and adoption of acceptable strategies to improve health literacy.

Keywords: Health literacy, nurses, communication, ethnography

SS 7

The Role of Health Literacy in Predicting Patient-provider Communication in Beijing Secondary Students

Shuaijun(Jun) Guo *1,2, Xiaoming Yu 3, Elise Davis 2, Rebecca Armstrong 2 and Lucio Naccarella 2.

1. Centre for Community Child Health, Murdoch Children's Research Institute, Royal Children's Hospital, Melbourne, Australia

2. Melbourne School of Population and Global Health, University of Melbourne, Australia

3. Institute of Child and Adolescent Health, School of Public Health, Peking University, China

Background: Health literacy is an important and modifiable social determinant of health. While health literacy in China has gained momentum in recent years, most studies focus on adults rather than

adolescents. Additionally, little theory-driven empirical research has been conducted using skills-based instruments.

Aims: The present study aims to apply Manganello's framework to investigate how health literacy is related to its antecedents and patient-provider communication in Beijing secondary students.

Methods: A cross-sectional study was conducted with 650 students in Years 7 to 9 from four secondary schools in Beijing. Based on Manganello's health literacy framework, a self-administered questionnaire was designed to collect information on health literacy, its antecedents, and patient-provider communication. Three instruments (the 8-item Health Literacy Assessment Tool (HLAT-8), the 6-item Newest Vital Sign (NVS), and the 47-item Health Literacy Survey (HLS-Asia-Q) were used to measure students' health literacy from different perspectives. Path analysis was used to investigate the mediating role of health literacy in predicting patient-provider communication.

Results: Overall, students' health literacy in Beijing was 26.37 ± 5.89 (HLAT-8); 3.65 ± 1.64 (NVS); and 36.80 ± 9.59 (HLS-Asia-Q). The proportion of students with low health literacy varied by self-report and performance-based instruments, ranging from 29.0% to 45.5%. Manganello's health literacy framework was supported by the data collected ($\chi^2/df=1.152$, $p=0.264$, $CFI=0.994$, $TLI=0.991$, $RMSEA=0.016$). Personal self-efficacy ($r=0.11$, $p=0.009$), social support ($r=0.18$, $p<0.001$) and school environment ($r=0.27$, $p<0.001$) predicted students' health literacy, which in turn predicted patient-provider communication ($r=-0.17$, $p<0.001$).

Conclusion: Promoting adolescent health literacy could be a useful strategy to improve patient-provider communication,

which in turn contributes to better access to health services. For adolescent health literacy to be improved, a holistic approach is needed to increase students' self-efficacy, promote social support, and create positive school environments.

Keywords: Health literacy, patient-provider communication, secondary students, China

SS 7

Strengthening the prevention of occupational diseases at surgical hospital through survey in Viet Duc hospitals for ergonomie

Luong Mai Anh 1, Nguyen Thi Thu Huyen 1, Nguyen Duc Chinh 2, Tran Tuan Anh 2

1. Health Environment Management Agency, Ministry of Health

2. Viet Duc University Hospital

Background: Occupational diseases to health workers, including poor posture back pain (ERGONOMIE) met quite popular, especially for nurses working in the surgical facilities as well as intensive care. Aim of this study is to assess the situation ERGONOMIE disease and to find the related factors at the Viet Duc University hospital in collaborating with the Health Environmental Management Agency, Ministry of Health.

Methods: A cross sectional survey conducted in 2016 at VietDuc University Hospital. Medical staff including doctors, nurses and those who directly care for patients, regardless of gender, have the seniority of 2 years or more were enrolled. Poor posture disease and problems of locomotion system are recognized. The data collected and processed by software SPSS 18.0.

Results: 1,209 health workers were enrolled, men accounting for 36.2% and women 63.8%. Classifications of back pain are divided into 3 levels:

Level 1 - mild pain (pain, endure, not influence to personal activities)

Level 2 - moderate pain (pain, soreness, discomfort, life activity restricted, however not need other people to help)

Level 3 - a pain (Pain discomfort, daily life activity restricted so need others to help).

The findings are: 38.7% at the level 1, 21.2% at level 2 and level 3 1.4%.

Several related factors: 47.5% regularly lifting, positioning and transporting patients; 33.5% to transport the medical materials with cart; 29.9% transporting or lifting an average of 20 patients per day.

New employees, lack of experience have back pain problems quite often than people who work there at good experience. 70.7% have not been trained in prevention, 21% do not have access to training materials on occupational diseases and prevention.

The hospital does not have standard equipment to enhance the transport of patients during surgery and care.

Conclusion: To reduce the risk of occupational diseases related to the poor posture of the medical staff, in addition to strengthening specialized equipment and lifting patients, the hospital at high levels such as specialized hospital in surgery or in surgical departments should enhance programs on occupational diseases prevention through education, training and preventing advice more often.

SS 7

A school-based nutritional program on the management of childhood obesity

Hsiang Ju Pan, Li Ju Hung, Chieh Yu Chen, Shao Jiun Yang
Department of Family Medicine, Kaohsiung Veterans General Hospital, Taiwan.

Background: Lifestyle interventions are recommended for the management of childhood obesity to prevent future medical comorbidities. It is difficult to include correct nutrition- and physical activity-related knowledge in the already packed school schedule of children.

Aims: This study identified unhealthy dietary habits and physical activities and followed by tailored class-based education programmes. Finally, we evaluated whether such an intervention could change unhealthy behaviours and reduce obesity tendency among elementary students.

Methods: This study was conducted at an elementary school

from September 2015 to July 2018. We distributed a lifestyle questionnaire to assess the students' dietary habits and intervened with class-based nutrition programmes in each semester, and we distributed the questionnaire again at the end of the study. The body weight and body mass index (BMI) of the students were obtained, and they were categorised as underweight, normal, overweight, and obese according to the age-specific BMI.

Results: In total, 279 students were followed for 3 consecutive years. The most prevalent unhealthy dietary habit was the consumption of sweetened beverages in approximately 76% of the students, and a significant change was observed after our lifestyle intervention. The percentage of overweight and obesity in our study group was as high as 42.4% in boys and 27.1% in girls, and the average BMI was higher than the national standard in the first-year survey (18.5 kg/m² vs 17.8 kg/m², $p = 0.000$). However, at the end of the study, the percentages decreased to 36.3% and 23.3%, respectively. The increase in average BMI was delayed and approached the national standard (19.5 kg/m² vs 19.4 kg/m², $p = 0.364$).

Conclusions: The treatment of childhood obesity focuses on diet therapy and exercise; tailored and class-based education programmes in school yielded sustained behavioural change and are effective approaches for delaying childhood obesity.

Keywords: childhood obesity, lifestyle, health literacy, screen time

Session 8: Health literacy in maternal & child health

SS 8 KEYNOTE

International research to improve maternal and child health literacy: The Evidence for Better Lives Study

Manuel Eisner¹, Sara Valdebenito¹, Aja Louise Murray², Claire Hughes³, Adriana Baban⁴, Asvini D. Fernando⁵, Bernadette Madrid⁶, Catherine L. Ward⁷, Joseph Osafo⁸, Michael Dunne⁹, Siham Sikander¹⁰, Susan Walker¹¹, Vo Van Thang¹², Mark Tomlinson¹³, Pasco Fearon¹⁴

¹ Institute of Criminology, University of Cambridge, Cambridge, United Kingdom, mpe23@cam.ac.uk

² Department of Psychology, University of Edinburgh, United Kingdom

³ Department of Psychology, University of Cambridge, Cambridge, United Kingdom

⁴ Department of Psychology, Babes-Bolyai University, Cluj-Napoca, Romania

⁵ Department of Paediatrics, Faculty of Medicine, University of Kelaniya, Colombo, Sri Lanka

⁶ Child Protection Unit, University of the Philippines, Quezon City, Philippines

⁷ Department of Psychology and Safety and Violence Initiative, University of Cape Town, Cape Town, South Africa

⁸ Department of Psychology, University of Ghana, Accra, Ghana

⁹ School of Public Health and Social Work, Queensland

University of Technology, Brisbane, Australia

¹⁰ Health Services Academy, Islamabad, Pakistan

¹¹ Caribbean Institute for Health Research, The University of the West Indies, Kingston, Jamaica

¹² Faculty of Public Health and Institute for Community Health Research, Hue college of Medicine and Pharmacy, Hue University, Vietnam

¹³ Department of Psychology, Stellenbosch University, Stellenbosch, South Africa

¹⁴ Research Department of Clinical, Educational and Health Psychology, University College London, London, United Kingdom.

Background: Exposure to violence, abuse and neglect is among the most important risk factors for poor psycho-social and physical health of children over the life-course. The Sustainable Development Goals of the United Nations therefore ask member states to take effective measures to better address violence against children. Public health measures to prevent violence should target all age groups. However, it is particularly important to promote and implement measures that meet the needs of parents and their children from the very beginning. This includes exposure to violence during pregnancy, which is known to negatively affect child outcomes in the first years of life. However, there is a continued lack of practically relevant knowledge about the extent to which pregnant women and infants in low and middle income countries are exposed to violence, what the associated risk factors are, and how prevention strategies in

the healthcare sector can support parents' ability to provide a safe and caring environment for their child.

Methods: We will provide an overview of a new research and policy initiative called the Evidence for Better Lives Study (EBLS). EBLS is an initiative by an international consortium of researchers led by the University of Cambridge. It comprises eight study sites, namely Valenzuela (Philippines), Hue (Vietnam), Ragama (Sri Lanka), Tarlai (Pakistan), Cluj (Romania), Worcester (South Africa), Koforidua (Ghana) and Kingston (Jamaica). The present stage of the study includes standardised interviews with convenience samples of 150 women that were conducted during the third trimester of pregnancy in each study site. The interviews were completed following the same protocol and using the same questionnaire in all study sites. It comprises a broad range of practically relevant risk factors that are likely associated with exposure to violence. The collected data also include detailed information on exposure of the expectant mothers to violence at earlier stages of their lives, in the neighbourhood, and by their partners. When combined with an understanding of the current gaps of public health provision in each study site this evidence can provide a strong basis for advancing health literacy related to violence and neglect in the early stages of children's life.

Results: We will describe the EBLS study and the research that has been completed to date. We will show initial results on pregnant women's exposure to different types of violence. We will focus in particular on one aspect of maternal health literacy, namely the belief among pregnant women that physical punishment will help children to develop well. We will examine how widespread beliefs in support of corporal punishment are among expectant mothers and what factors predict such beliefs.

Conclusions

In the conclusions we will present an overview of how the Evidence for Better Lives research initiative can support policy makers and public health specialists in developing and implementing more effective strategies to address violence against children. In particular, we will discuss strategies that may help to address beliefs, among pregnant women, about the beneficial effects of corporal punishment on child development.

Keywords

Maternal and child health, violence against children, prevention science, pregnancy, international

SS 8

Understanding the health and social service needs of pregnant women in Vietnam: A method to compare the perceptions of health professionals and new mothers

Huyen Phuc Do a,b*, Thang Van Voc, Bach Xuan Tran d,e, Philip RA Bakera, Michael P Dunnea,

a School of Public Health and Social Work, Queensland University of Technology, Brisbane, Australia, phuchuyen@gmail.com, p2.baker@qut.edu.au, m.dunne@qut.edu.au

b Center of Excellence in Behavioral Medicine, Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam

c Institute for Community Health Research, Hue University of Medicine and Pharmacy, Hue City, Vietnam, vovanthang147@huemed-univ.edu.vn

d Institute for Preventive Medicine and Public Health, Hanoi

Medical University, Hanoi, Vietnam, bach.ipmph@gmail.com
e Department of Health, Behaviours and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States of America,

* Corresponding author: phuchuyen@gmail.com

Background: Societies with the best health literacy may be those where health professionals and consumers share similar perceptions of the quality of existing services and support systems. This study in central Vietnam aimed to systematically compare the perceptions of health service managers and clinicians in maternity care with the perceptions and experience of pregnant women.

Methods: From Oct 2018 to May 2019, we utilized qualitative semi-structured interviews and quantitative ratings of perceived service adequacy in Hue City, Vietnam. We interviewed 20 key informants (health care providers, health system managers) and 137 pregnant women. The WHO INSPIRE framework was utilized to enable focus on seven key dimensions of services and supports needed for pregnant women. The strategies include (i) Implement/enforce laws, (ii) norms and values, (iii) safe environments, (iv) income strengthening, (v) partner supports, (iv) response/support service, and (vii) education and skills based on their experience with services and supports during their pregnancy.

Results: Low scores indicate that there are no or very few problems or weaknesses in services; high scores suggest the services are very inadequate or mostly absent. Most respondents in both groups considered the available services to have some limitations, although few indicated the services were extremely limited. It was interesting to observe that the pregnant women's and service providers' perceptions were quite similar in five of the seven INSPIRE dimensions. However, women were much more likely than professionals to report that there were few system-level supports for partners, while the professionals perceived considerably more limitation in policies and services administration. Key challenges and gaps identified by both groups include limited human resources to support women experience adversity and violence, a lack of training for health and police personnel, and quite limited multi-sectorial cooperation. There were also indications that traditional cultural values tend to isolate women from receiving responsive social services when there are relationship difficulties and mental health problems.

Conclusions: The approach to systematically comparing health care providers and consumers' literacy regarding health services and supports for pregnant women using the WHO INSPIRE framework is quite innovative and could be applied in other contexts.

Keywords: WHO INSPIRE framework; pregnant women; service providers; perceptions of quality of services and social supports.

SS 8

The effect of health literacy and social support

development program on pregnant behavioral prevention for early adolescent

Peerapol Chaiyachat 1, Kesinee Saranrittichai 2

1. Master degree student Program in Health Education and Health Promotion, Graduate School, Khon Kean University, Thailand

2. Health education and Health Promotion department, Faculty of Public Health, Khon Kaen University, Thailand

This quasi-experimental research aimed to investigate the effects of health literacy and social support development program on pregnancy prevention for early adolescents. The participants consisted of 96 male and female students aged between 10 -13 years old, which assigned randomly into two groups: experimental group of 48 students and a comparison group of 48 students. The experimental group received the health literacy and social support development program for 8 weeks. The training program was composed of playing games, brain storming, the 6 skills of health literacy training, how to prevent pregnancy, giving comments and suggestions on video, role play, presentation of adolescents' own ideas for pregnancy prevention, self-study through information on applications and websites online, group discussion and knowledge evaluation. Main outcome was pregnancy prevention behavior of adolescents. Data were collected by using self-administer questionnaires. Percentage, mean, standard deviation, maximum and minimum were used for descriptive statistic, Paired T-Test was used for internal difference comparison, and Independent T-Test was used for between groups comparison, at 95% confident interval and at 0.05 level of significance.

Results showed that the experimental group had mean score of adolescent's pregnancy prevention behavior higher than comparison group with statistical significant (Mean difference = 3.67, 95% CI : 1.56 to 5.78, $p < 0.001$). In addition, the experimental group also had mean score of access to information skill, communication skill, media literacy skill, decision making skill, and self-management skill higher than comparison group after program intervention with statistically significant ($p < 0.001$).

It is suggested that in order to promote adolescent pregnancy prevent behavior, social support and health literacy need to be focused for implementation, especially from peers, parents, friends, health care provider and teachers in school.

Keyword: early adolescent, pregnancy prevention, intervention, social support, health literacy.

SS 8

Diversity in using the internet to find health information among mothers with children under five years old at Vietnam national children's hospital in 2019

Dinh Thai Son, Le Thi Yen, Pham Hai Thanh, Luu Ngoc Minh, Do Thi Thanh Toan, Luu Ngoc Hoat
Hanoi Medical University, Vietnam

Background: Nowadays, searching engines and online sources contribute to the ideal of the 'digitally engaged patient' who actively seeks out information about health and medical issues using the internet as part of self-empowerment and health literacy efforts.

Objectives: This article aims to describe the diversity of finding and using the Internet to find medical information among mothers of children under age 5 at the Vietnam National Children's Hospital in 2019.

Method: This cross-sectional study was conducted on 369 mothers who had a child under 5 years visiting the Vietnam National Children's Hospital for examination and treatment in 2019. Variables about behavior of seeking health information which includes 16 variables with related questions about online health information search behavior, yes / no answers. We used the Latent Class Analysis (LCA) as a model-based method of classification to estimate the proportion of the population in each group, estimate group means.

Results: The results of LCA including 3 clusters, with the probability value of each cluster were cluster 1 (0.6179), cluster 2 (0.261), cluster 3 (0.121). Realizing that cluster 3 had the least diversity, the highest option was using direct messages to receive advice from doctors or medical staff, they did not tend to use the internet to seek medical information. The diversity in cluster 2 was the highest, most of them chose "Yes" for all questions. Meanwhile, group 1 had mainly been searched for symptoms and diagnosis ($pr = 0.9$); seek treatment ($pr = 0.8$).

Conclusion: The clusters that identified can help to adjust the development and deployment of health literacy intervention to target mother groups.

Keyword: Diversity in using the internet, health information, health literacy

SS 8

Pregnancy health literacy among teenagers in Kaysone District, Savannakhet Province, Lao Pdr

Phonevilai Santisouk, Visanou Hansana, Nguyen Thanh Huong

Faculty of Public Health, University of Health Sciences. Laos

Background and Objective: Pregnancy health literacy especially among teenage itself is a major protective factor for teenage pregnancy. In Laos, 15% of mother mortality ratio was comprised of teenage mothers, 18% of girls aged 15-19 have begun child bearing and more common in rural than urban area.

Aims: The aim of this study was to describe pregnancy health literacy and its related factors among teenagers in Kaysone district.

Method: This was a cross-sectional study, where conducted in 2 villages, Kaysone district. TPHL score was collected by using face to face interview with 33 items during the period of January 2019. Calculation of TPHL index score was based on the HL-EU index formula. Level of TPHL index was also based on HL-EU standard level and used descriptive statistics to

explain the score and levels. Descriptive analyses were performed to analyses the individual, family, peers, school variables and to investigate the level of TPHL and used linear regression to identify factors related with TPHL.

Results: The overall score of teenage pregnancy health literacy was a mean of 27.07. Most 60% of adolescents had problematic TPHL level and only 0.4% had excellent TPHL level. TPHL was positively associated with living in urban areas ($\beta=2.42$; $p=0.002$), higher education ($\beta=3.89$; $p<0.001$), schooling ($\beta=0.96$; $p=0.001$), being single ($\beta=1.9$; $p<0.001$), higher education of father and mother ($\beta=0.72$; $p=0.007$; $\beta=0.37$; $p=0.001$) and attending the class where sex education content included ($\beta=5.12$; $p<0.001$).

Conclusion: The study results showed that most adolescents had problematic TPHL level. Low TPHL scores show the importance of sexual education for adolescents should be improved and also on increasing the TPHL to leading good health situation in Laos.

Keywords: pregnancy, teenage pregnancy, health literacy, pregnancy health literacy

SS 8

The effectiveness of health education program with utilizing line application for enhancing health literacy in motorcyclist accident prevention among non-formal education adolescents

Nattawat Panyasai 1, Chulaporn Sota 2

1. Master degree student Program in Health education and health promotion, Graduate school, Khon Kaen University, Thailand.
2. Health education and health promotion department, Faculty of Public Health, Khon Kaen University, Thailand.

This quasi – experimental research which aimed to study the effectiveness of health education program by utilizing line application for enhancing health literacy in motorcyclist accident prevention among non-formal education adolescents. The average age of the sample group age ranged from 15 to 19 years old adolescents who live in Tha Li district, Loei province. In the experimental group, the research applied line stickers in a satisfaction survey in order to enhance health literacy in preventing motorcyclist accident among non-formal education adolescents. The study applied simple random sampling to select the sample group. There were 78

Session 9: Health literacy in maternal & child health

people total in the sample group which divided into 39 people in the experimental group and the comparison 39 people. The experimental group received health education along with line program and invited into the line group chat called “Safe Teen Driver” as a channel to enhance their health literacy and sent “Safe Drive” line stickers into the group chat three times a day every day during the experimental period at 8:00 a.m., 12:00 p.m. and 6:00 p.m. The “Safe Teen Driver” chat group was a way to enhance the adolescent’s health literacy in preventing accidents arisen from motorcycles. Furthermore, the experimental group were supplemented with lectures with power point slides, VDO, and accident prediction test through Honda Safety APT Application, the access to health service information via ThaiEMS 1669 Application, group discussion, demonstration, practice, and along with follow-ups throughout the experimental period for 12 weeks. The research used questionnaire to collect the data. The data of the study were utilized descriptive statistics which combined of percentage, mean, standard deviation (SD), median, maximum, minimum, and the comparison within group and between groups by using inferential statistics included Paired t-test and Independent t-test respectively. The research was set the significance level at 0.5. The result showed that the experimental group has a higher score of overall understanding of six aspects of the health literacy in preventing accidents from motorcyclist driving among non-formal education adolescents. The experimental group also has a higher average score in many aspects which were knowledge, understanding, access to health service, communication for enhancing self-care, decision making skill, self-management, media literacy, self-practice. The result of experimental group has a significance result higher ($p < 0.001$) than before and than comparison group. Moreover, the experimental group has a high average satisfaction score in many aspects in using “Safe drive” Line stickers includes character of the stickers, the uniqueness of the stickers, variety of the stickers, and quality of the stickers. As a result, “Safe Drive” stickers have an effect towards the experimental group in enhancing their understanding in health literacy and raise the awareness in preventing accident from driving motorcycles.

Keywords: Health education program¹, Health literacy², Line application³, Accident prevention⁴, Non-formal education adolescents⁵

SS 9 KEYNOTE

The place of parental nutrition literacy in prevention of NCDs

Altyn Aringazina, Yelena Khegay

Kazakhstan School of Public Health, 19A, Utegov Street, Almaty, Kazakhstan

Background: Health literacy is a stronger predictor of health than age, income, education, race and employment. The interest to this topic has grown remarkably during the past decade, still there's not enough studies focused on the specific part of health literacy - nutrition literacy (NL). At the same time, it is known that poor diet contributes significantly to development of NCDs and increase in premature deaths rates. Obesity in children remains an important public health problem globally.

Aims: The aim of the study was to assess the nutrition literacy of parents of school-aged children 6-13 y.o., living in Almaty, Kazakhstan, and evaluate the association between parental NL scores per section and other variables, such as parental age, level of education and the number of children 6-13 y.o. per family.

Methods: We conducted a 3-day online survey between February and March, 2019 using a Nutrition Literacy Assessment Instrument (NLit).

363 participants answered the questionnaire, additional information (parental gender, level of education, children's gender, age, weight and height) was self-reported.

Results: According to the results, "Food Portion Size" and "Label Reading" sections of the questionnaire were the most problematic for respondents (41.6% and 25% of participants of participants demonstrated inadequate and marginal NL respectively).

The following factors were identified as influencing parental nutritional literacy: respondents' level of education (respondents with higher education got higher scores, $p=0.0292$) and number of children aged 6-13 y.o. per family (respondents, having 3 and more children of above mentioned age in their families, scored less points per sections, $p=0.0312$).

Conclusions: The results of the study indicate that further research and better education and health promotion activities need to be implemented in Kazakhstan to address the gap in population food knowledge and consumer skills and improve NCDs prevention. These policy interventions require multi-sectoral collaboration.

Keyword: *nutrition literacy, parental education, NCDs prevention*

SS 9

CIS Countries Group Initiative within the WHO European Action Network on Health Literacy for Implementation of Prevention and Control of NCDs

Maria Lopatina, Marina Popovich, Anna Kontsevaya, Oxana Drapkina, Altyn Aringazina, Miguel Telo de Arriaga, Kristine Sorensen

National Medical Research Center for Preventive Medicine under the Ministry of Health of the Russian Federation

Background: World Health Organization (WHO) recognizes health literacy (HL) as one of the key health promotion pillars to achieve 2030 Sustainable Development Goals (SDG) Agenda. Political calls for health literacy-related actions in the

context of health promotion are on the rise. A new European Action Network on Health Literacy for Implementation of Prevention and Control of Noncommunicable diseases (HL-NCD Network) was established in 2019 to promote health literacy for achieving progress in beating NCDs, as well as preventing diseases and promoting health through the life-course. The HL-NCD Network is based on global and national health literacy experience to improve implementation in prevention and control of NCDs. The Network was launched on the initiative of Portugal and the Russian Federation, who will be co-leading the Network Secretariat for two years. Representatives of 25 Member States took part in the first meeting of the Network, including representatives of 12 Commonwealth of Independent States (CIS) countries. During the meeting, representatives of CIS countries expressed an interest to initiate a group for the further development of HL in CIS countries and making the work visible at the international arena. The first steps of this initiative would be to analyze whether there are nationally accepted terms for HL in native languages and existing HL national activities in participating CIS countries.

Aims: to formulate a research agenda on the analysis of existing terms for HL used in national languages and the state of HL practice and policy in participating CIS countries.

Methods: Methods used in the research included content analysis and expert opinion survey.

Results: Expected results will include a consideration on the HL terminology use, activities and challenges on the way of promoting HL in participating CIS countries that may contribute to the further development of HL concept in these countries. **Conclusions:** For joint actions on promoting health literacy for implementation of prevention and control of NCDs at the international level it is important to have an idea of a common understanding and approaches used. **Keyword:** health literacy, CIS countries, HL-NCD Network

SS 9

Health literacy among former Soviet Union immigrants

Uliana Kostareva, Eva-Maria Berens, Diane Levin-Zamir, Altyn Aringazina, Maria Lopatina, Kristine Qureshi, Luba Louise Ivanov Tetine Sentell

University of Hawai'i at Mānoa, School of Nursing and Dental Hygiene, 2528 McCarthy Mall, Webster Hall, Rm 421 Honolulu, HI 96822, USA

Background: About 258 million people of the world's population are international migrants (immigrants). Of those, more than 25 million are Russian-speakers from the former Soviet Union (FSU). This growing diaspora shares a common language and historical legacy. Dispersed worldwide, many have settled in the United States, Germany, and Israel. FSU immigrants may experience challenges navigating host country's healthcare system as well as finding, processing, and using health information because FSU healthcare system differs significantly from many other countries. Despite

substantial research available about other immigrant groups, according to multi-lingual literature review, there is limited research available about the health literacy of FSU immigrants and residents.

Aims: Formulate a research agenda to better understand and compare health literacy of FSU immigrants and FSU residents across healthcare systems of five countries.

Methods: A multi-disciplinary team from the United States, Germany, Israel, Kazakhstan, and the Russian Federation will synthesize the knowledge available about health literacy across these countries. We will consider socioeconomic and demographic factors and assess the contribution that organizational health literacy and healthcare systems have on health literacy and health equity. We will compare FSU immigrants who emigrated to the United States, Germany, and Israel after 1980s and current FSU residents living in Kazakhstan and the Russian Federation.

Results: Results will include a better picture of health literacy among FSU immigrants and residents in the context of healthcare systems and organizations. Additionally, migration circumstances, demographic, socioeconomic, cultural, and linguistic factors that may contribute to the health literacy of FSU will be included.

Conclusions: Health literacy is dependent on individual factors and is influenced by many factors at the country, organizational and system levels. To address health literacy on a global scale, a multi-country comprehensive approach to better understand factors that influence health literacy among immigrants is necessary.

SS 9

The issues regarding early rehabilitation of children with Down Syndrome

Armida Yelekenova, Altyn Aringazina
Kazakhstan School of Public Health, 19A, Utegov Street,
Almaty, Kazakhstan

Session 10: Health Literacy and CRC

SS 10 KEYNOTE

Precision medicine in population-based colorectal cancer screening

Professor Hsiu-Hsi Chen
National Taiwan University

Population-based screening for colorectal cancer (CRC) has been demonstrated as an effective modality for mortality reduction. Long disease natural history, the existence of premalignant lesion, and multiple screening detection modalities turns CRC as a preventable disease. However, population-based screening program in Asian countries is still limited partly due to limited resources and partly due to low screening rate. Personalized screening strategy is considered as an alternative and efficient method by making use of risk stratification based on informative data collected nowadays. Evidence from Taiwanese population-based screening program showing the dose-response manner between the faecal hemoglobin (f-Hb) concentration and

The rehabilitation and social adaptation of children with Down syndrome (DS) is a great health care issue in Kazakhstan. In former Soviet Union about 90% of children with DS were isolated in public institutions. The situation began to change in early 90s, yet, there are not enough opportunities for integration of people with DS into society.

Aims: The aim of the study was to identify the difficulties in early rehabilitation of children with DS in Kazakhstan and to develop recommendations for their social adaptation and integration into society.

Methods: We conducted an online survey between April and May, 2019 using a questionnaire, designed specifically for this study. 117 respondents, mothers of children with DS, living in Almaty, Kazakhstan, took part in the survey.

Results: The frequency of DS increased between 2014 and 2018 (from 0.24 to 0.76 per 1000 newborns). 50% of respondents are not satisfied with the provision of information by medical staff and social workers about this condition and application process for further rehabilitation procedures after giving birth to a child with DS. Respondents also highlighted that they got no psychosocial support neither at the maternity hospital (82%), nor at PHC clinics (66.1%). 36.1% of parents reported emotional burnout. The main co-morbidities in children with DS were congenital heart problems (69.8%), thyroid dysfunction (22.9%) and vision disabilities (21.9%). At the same time 89.1 % of respondents mentioned that they lack access to the public rehabilitation facilities. The most visited development center is a private facility, organized by mothers of children with Down syndrome on a paid basis.

Conclusions: The activities to improve public awareness about children with DS, continuity of care and organization of access to the rehabilitation facilities for children with DS and their parents are required to be implemented in Kazakhstan with strong governmental support.

Keyword: Down syndrome, early rehabilitation, social awareness

the disease outcome, including incidence of consequent colon neoplasm, risk of developing interval cancer, and mortality of CRC, facilitates the implementation of precision medicine in population fecal-based colorectal cancer screening. In addition, the role of biomarkers on the epigenetics of aberrant DNA methylation of CpG islands associated with gene silencing on colorectal neoplasm provides further possibility to stratify the population based on personal characteristics. How to apply information on baseline f-Hb to make personalized screening policy in terms of varying screening modality, inter-screening interval, age to begin and stop screening, and the determination of age- and gender-specific cutoff is presented.

SS 10

Taiwan Colorectal Cancer Screening Program

Sam Li-Sheng Chen
Taipei Medical University

In 2004, Taiwanese government launched a nationwide screening program after a successful pilot program and fecal immunochemical test (FIT) is offered biennially to individuals aged 50 to 69 (extended to 75 in 2013). The screening (coverage) rate of this screening was 21.4% and repeated screening rate was 28.3% in the inaugural 5 years (2004–2009) but increased to 56.6% and 52.3% in 2014. A recent analysis from the program has demonstrated that CRC mortality and incidence of advanced stage CRC were reduced by 35% and 29%, when comparing those who did and did not participate in FIT screening.

Nevertheless, there were some challenges and obstacles that needed to be tackled. First, the occurrence of interval cancers, which are associated with the performance of screening tests or quality of colonoscopy, has affected the program sensitivity. Second, increasing participation in the program has increased the demand for colonoscopy and the burden on public health workers. Third, some individuals are non-compliant with FIT screening, and with the recommendation for colonoscopy after a positive FIT, which may be the result of insufficient awareness toward CRC and screening of the public. Fourth, long-lasting financial support for this program is necessary for its success. All of these problems need to be solved via collaboration between the screening organizer, screening distributor, and professional societies.

SS 10

A population-based randomized controlled trial for colorectal cancer screening in Khon Kaen, Thailand: Implementation and current situation

Pongdech Sarakarn^{1,2}, Patravoot Vatanasapt^{2,3}, Chananya Jirapornkul^{1,2}, Siriporn Kamsa-ard^{1,2}, Naowarat Maneenin^{1,2}, Supot Kamsa-ard^{1,2}, Wongsane Khruengchai⁴, Sam Li-Sheng Chen⁶, Amy Ming-Fang Yen⁶, Sherry Yueh-Hsia⁷, Jean Ching-Yuan Fann⁸, Tony Hsiu-Hsi Chen⁵

¹Epidemiology and Biostatistics Department, Faculty of Public Health, Khon Kaen University, Thailand

²ASEAN Cancer Epidemiology and Prevention Research Group, Khon Kaen University, Thailand

³Department of Surgery, Faculty of Medicine, Khon Kaen University, Thailand

⁴Nam Phong District Public Health Office, Khon Kaen Province, Thailand

⁵Institute of Epidemiology and Prevention Medicine, College of Public Health, National Taiwan University, Taiwan

⁶College of Oral Medicine, School of Oral Hygiene, Taipei Medical University, Taiwan

⁷Department of Health Care Management, College of Management, Chang Gung University, Taiwan

⁸Department of Health Industry Management, School of Healthcare Management, Kainan University, Taiwan

Background: In Thailand, colorectal cancer (CRC) is one of the five most common cancers and incidence trend of CRC is gradually increasing in both sexes. Previous studies showed

that CRC can be prevented by screening, but the national CRC screening is not conducted in the whole country of Thailand. Some knowledges and experiences of CRC screening based on the population-based screening in the small scale should be considered.

Methods: A population-based randomized controlled trial for CRC screening was conducted and began in May, 2016. All people aged 45 to 74 years living in Nam Phong District, Khon Kaen Province, Thailand, and willing to participate are being recruited using an invitation letter. Enrolled participants are randomly allocated by a computer-generated randomization program either to a study arm (receive sample kit for Fecal Immunochemical Test-FIT) or to a control arm (no provision of kit). Positive FIT cases are subsequently confirmed by a colonoscopy examination, and negative FIT cases are re-tested with FIT every two years. Some issues were analyzed using various statistics.

Results: A total of 3,371 enrolled participants provided a complete set of data for each arm. Of those randomly assigned to the study arm and completed for testing by FIT (3,180, 94.3%), 237 (7.45%) were found to be positive, 102 (43.04%) males and 135 (56.96%) females. We found that awareness of CRC screening of both arms is still low, while the f-Hb concentrations at the different value can be related with several variables which is important to consider and study for insight, including sex, aged groups and hypertension.

Conclusions: Both awareness and f-Hb concentrations will be considered to think over for implementation regarding several activities to do for intervention and to study for insight, especially the relationship of f-Hb concentration among sex, aged groups, and related non-communicable disease (NCD).

Keywords: colorectal cancer screening, fecal immunochemical test, Thailand

SS 10

Disease Burden and Screening Policy for CRC in Vietnam

Vo V.Thang^{1,2}, Le D.Duong^{1,2}, Nguyen TK Cuong, Nguyen Xuan Chi³, Nguyen Minh Quan³

¹ Institute for Community Health Research, Hue University of Medicine and Pharmacy, Vietnam

² Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam

³ Thu Duc Hospital, Ho Chi Minh city, Vietnam

Colorectal cancer (CRC) was currently considered as the fourth leading cause of cancer worldwide. In Asia, the incidence and mortality of CRC have been increasing and becoming a big concern of healthcare policy at national level. Cancer was predicted to be the leading disease burden in Vietnam in the next decades. The 5-year prevalence of CRC is 27.3 per 100,000, also is the fifth common cause of cancer - related incidence. CRC account for approximately 9% of all new cancer cases in both sexes as well as the second most common cancer in female and the fourth most common cancer in male (IACR, 2018). Regarding newly diagnosed patients, there was 67.8%

CRC that presented with stages III and IV at diagnosis (Bui Dieu et al 2015). Therefore, Vietnam has been ranked in the list of countries with the highest rate of cancer fatalities (WHO, 2016).

The economic burden of CRC of the whole society was estimated about 14,268.3 billion VND. The values fluctuated sharply from stage I to stage IV, accounted for 6.9 billion VND; 5,731.2 billion VND; 3,564.5 billion VND and 4,965.7 billion VND, respectively. Majority of CRC patients were not affordable to pursue their treatment because of health insurance was not coverable enough to pay for all treatment costs, especially targeted drugs and high –tech equipment and other indirect costs. It was nationally reported that in all stages except stage I, the economic burden related to patient care was higher than that of medical services (Phan T. 2015). This problem led to quite high rates of treatment abandonment that resulted in seeking alternative or traditional treatments or patients not being admitted to hospital for treatment until the cancer was so late that they could only receive palliative care (T. V. Thuan et al 2018).

Session 11: Health Literacy in health promotion

The National Cancer Control Plan (NCCP) was firstly started in 2008 and continued to implement in a new period (2015-2025) in efforts to provide effective diagnosis and treatment. However, there was no comprehensive programme for CRC screening and early detection cover nationwide and also lacking hospital specialized and palliative care in oncology. In additional, other challenges were still limited in policy development, resources and partnership development for CRC control at national and international level.

It's very necessary to intensify evidence based planning and management of CRC early diagnosis and treatment (SBIRT approach). CRC screening, capacity building of health personnel and improved monitoring and CRC registry should be paid more attention at NCCP's direction in Vietnam. A pilot community based CRC cohort study will be feasible for conducting in either the central or southern Vietnam.

Key words: Colorectal cancer (CRC), International Agency for Research on Cancer (IACR), National Cancer Control Plan (NCCP), Disease burden, Screening.

SS 11 KEYNOTE

Promoting Health Equity at the Intersection of Health Literacy, Language and Culture

Sabrina Kurtz-Rossi, M.Ed. Assistant Professor, Public Health and Community Medicine, and Director, Health Literacy Leadership Institute, Tufts University School of Medicine, Boston, Massachusetts USA

Improving health care quality and achieving health equity are critical goals for changing societies around the world. Eliminating health literacy, language and cultural barriers to health information and health care services is essential to reaching these goals. Inequities in health care are especially prevalent for increasing numbers of immigrants and refugees worldwide. The language of health care and public health is to some extent 'foreign' to most people, even among trained professionals when navigating next steps related to a new diagnosis or in a public health emergency. Those with low health literacy, limited proficiency in the dominant language and culture, and less education attainment are even more likely to receive inadequate health care and miss out on crucial public health messages. Intersectionality asserts that the most marginalized in society are often disadvantaged by multiple sources of oppression related to minority status, language, sexual orientation, religion, and other identity markers. Intersectionality applied to health literacy, language and culture recognizing the influence literacy, language and culture have on the content and outcomes of health communication and the risks of addressing one barrier or source of discrimination without addressing them all.

In this session Sabrina Kurtz-Rossi, Assistant Professor of Public Health and Community Medicine at Tufts University School of Medicine and Director of the Tufts Health Literacy Leadership Institute, will define intersectionality and examine the barriers and opportunities for addressing barriers at the intersection of health literacy, language and culture. Through stories from her own practice and experience, Professor Kurtz-Rossi will demonstrate how health literacy interventions can be applied to develop understandable and actionable health information and services that are responsive to literacy needs, health beliefs, and preferred languages. She will demonstrate how to apply plain language as a strategic response to build trust and create transparency to address misinformation and increase community engagement and underrepresented groups in health research. Upon conclusion of this session, participants will be able to recognize the intersectionality between health literacy, language and culture and its influence on health communication and health outcomes; integrate evidence-based health literacy and cultural competency intervention to offer effective, understandable and respectful health information and services; and

SS 11

Effects of Mental Health Literacy Promotion Program with Positive Psychology Concepts for Promoting Stress Management Behavior among Village Health Volunteers

Watcharin Sauhem 1, Pannee Banchonhattakit 2
Faculty of Public Health, Khon Kaen University

Background: Stress negatively affect to physical and mental health, which is a common cause of suicide around the world.

Methods: This quasi-experimental research aimed to investigate the effects of mental health literacy (MHL) promotion program with positive psychology (PP) concepts for promoting stress management behavior among village health volunteers (VHV).The samples were VHV who were moderate stress level by screening and inclusion criteria were set at age 25 to 59 years old. The sample was randomized were divided into two groups; an experimental and a comparison group of 42 participants in each group.The experimental group received the MHL promoting with PP concepts program that comprised of various activities such as appreciative inquiry, group process, demonstration and practice of stress management.The duration of intervention was 12 weeks. While, the control group did not receive this program. Data were collected before and after by self-questionnaires .Comparative analysis were tested by Paired sample t-test, and independent t-test, 95 % Confident interval and significant setting at level 0.05

Results: The results showed that after the experiment, the experimental group had mean scores of MHL, knowledge and understanding about stress, access to mental health information, media literacy, communication skills, decision making, mental health first aid, and stress management behavior with PP approach higher significantly than before the experiment and higher than the comparison group (p-value < 0.001). Stress level of the experimental group was decreased significantly than before the experiment and the comparison group (p-value < 0.001).

Conclusion: So, this program could reduce stress of VHV and recommended for distribution to other areas.

Keywords: Mental health literacy, positive psychology, stress management

SS 11

Effects of oral health literacy program on promoting oral health behaviors and oral health status among Thai adults with type 2 diabetes mellitus.

Supasin Deeraksa 1, Wipada Jitpreeda 2, Suwit Udompanich 3, Benja Muktabhant 4, Rajda Chaichit 5

1. Doctor of Public Health program, Faculty of Public Health, Khon Kaen University, Khon Kaen; Department of Dental Public Health, Thakhuntho Hospital, Kalasin Provincial Public Health Office, Kalasin, Thailand.

2. Department of Dental Public Health, Thakhuntho Hospital, Kalasin Provincial Public Health Office, Kalasin, Thailand.

3. Department of Public Health Administration, Health Promotion and Nutrition, Faculty of Public Health, Khon Kaen University, Khon Kaen, Thailand.

4. Department of Public Health Administration, Health Promotion and Nutrition, Faculty of Public Health, Khon Kaen University, Khon Kaen; Research Group on Prevention and Control of Diabetes Mellitus in the Northeast Region, Khon Kaen University, Khon Kaen, Thailand.

5. Department of Preventive Dentistry, Faculty of Dentistry, Khon Kaen University, Khon Kaen; Research Group on

Background: Oral health is the sixth complication in diabetic patients. It is a high prevalence and has multiple negative impacts on their health. Low oral health literacy is associated with worse health and less understanding of prevention, maintenance, and self-care instruction and advice.

Objectives: To examine the effects of an oral health literacy program on promoting oral health behaviors and oral health status among adults with type 2 diabetes mellitus in Thakhuntho district, Kalasin province, Thailand.

Method: The quasi-experimental study was using a pretest-posttest design on 80 diabetic patients (40 in the experimental group and 40 in the comparison group). The implementation consisted of different activities, which include a lecture about diabetic and oral health, group discussion, and walk rally. Four instruments were used in this study, including demographic data, functional oral health literacy skill (Thai REALD-30), oral health behaviors as well as a plaque index and a gingivitis index measurement. Data were analyzed using frequencies, percentage, mean, and standard deviation. The differential data analysis between groups was independent t-test with a statistically significant level of 0.05.

Results: After participating in the oral health literacy program, the mean scores of oral health behaviors, plaque levels, and gingivitis levels in the experimental group were significantly higher than the comparison group (p -value < 0.001). However, the functional oral health literacy skill using Thai REALD-30 was not statistically significant after participant in the program.

Conclusion: This study is important to improve the functional oral health literacy and oral health behaviors on their oral health in type 2 diabetic patients. Therefore, the development program of oral health literacy that can help to understand community context, lifestyles diabetes patients, and oral health care service in the setting area.

Keywords: Oral health behaviors, Oral health literacy, Oral health status, Type 2 Diabetes Mellitus.

SS 11

The effects of health literacy and motivation application program on alcohol drinking behavioral reduction of male adolescents.

Apinya Ratsrimuang, Kesinee Saranrittichai
Faculty of Public Health, Khon Kaen University, Thailand

Background: Alcohol consumption is a major problem affecting health in particular with male adolescents in Thailand. A total of 23.8% were adolescent drinker sat the age 15-19 years. The primary cause of alcohol drinking in adolescent was from peers. Communication with friends was more easily access to information from each other and helped making decision to drink together. Decreasing alcohol consumption in adolescent need to be focused on qualify

information and motivation from friends in the positive ways. Thus, the development of health literacy and motivation program need to be developed and implemented to reduce alcohol consumption.

Objectives: This study aimed to determine the effects of health literacy and motivation application program on alcohol drinking behavioral reduction of male adolescents.

Method: This quasi-experimental design study aimed to determine the effects of health literacy and motivation application program on alcohol drinking behavioral reduction of male adolescents. Study samples were 108 male adolescents, the aged of 17-19 years old. Stratified multi stage random sampling was done to obtain 54 male adolescents for comparison group and 54 male adolescents for experimental group. The program included the development of 6 dimensions of health literacy: 1)accessing to qualify information, 2)understanding the information, 3)communication skill, 4)media literacy, 5)making decision, and 6)management on alcohol consumption reduction. This program was implemented with the experimental group to increase health literacy for 12 weeks. The instrument used in this study were 1)health literacy assessment questionnaire for the Thai 15 years old and over, 2)the 3E 2S health behavior questionnaires and 3)the Alcohol Use Identification Test (AUDIT). Descriptive statistics, mean difference, paired t-test, independent t-test with significance at 0.05 were used for data analysis.

Results: The results showed that the experimental groups had higher score for all dimensions of health literacy after program implementation than before program implementation with statistical significant (mean difference= 35.53, 95% CI: 30.75 to 40.32; $p < 0.001$) and alcohol drinking behavioral reduction had lower score for all dimensions with statistical significant (mean difference = -8.46, 95%CI : 7.48 ถึง -9.43; $p < 0.001$). In addition, Health literacy in experimental group were also higher than comparison groups after program implementation with statistical significance (mean difference= 28.40, 95% CI: 23.49 to 33.32; $p < 0.001$). and alcohol drinking behavioral reduction had lower score for all dimensions with statistical significant (mean difference = 8.64, 95%CI : 7.48 ถึง 9.80; $p < 0.001$)

Conclusion: It is suggested that the application of health literacy and motivation program contribute to alcohol drinking reduction in adolescents. In particular health literacy program for effective communication need to be quick and in positive ways to help adolescent easily access to qualify information and appropriate making decision to reduce alcohol drinking behavior.

Keywords: alcohol drinking behavior, health literacy, motivation, male adolescents

SS 11

Health Literacy on Food Consumption among School Adolescent in Vientiane Capital

Somphone Dalavong 1, Vassana Thammavongsa 2,

Background: Problems related to insufficient nutrition and/or unhealthy diet are the current concern in Laos, especially unhealthy food consumption of adolescents. The nutritional status and eating practice reflect the food literacy (FL) of individuals and consequently reflect the self-capacity of healthy eating. FL of young people is therefore needed to be assessed. The aim of the current study is to assess the food literacy of upper secondary school adolescents in Vientiane capital.

Aims: To assess the literacy in Nutrition and Determine the influent factor to Nutrition issue for secondary student Vientiane Capital

Method: This cross-sectional study was conducted with 540 upper secondary school adolescents, using self-administered questionnaire. The analysis was done by using SPSS v.22 to describe the data and determine factors associated with FL index score. FL index was calculated by HL-EU index formula and level classification. Testing of compare-means and Pearson Correlation were performed to find association in univariate analysis. Multiple Linear Regression were done to determine the most potential factors that influence the FL index score, with regression coefficient (β) and statistical significance (p -value < 0.05).

Results: FL index of school adolescents was 30.97/50.00 (± 5.9). FL of most respondents (48.1%) were in problematic level. Factors positively influencing the FL index score in school adolescents were knowledge on healthy diet ($\beta = 0.28$; 95%CI = 0.001 - 0.55; $p = 0.050$), information received from family ($\beta = 1.28$; 95%CI = 0.68 - 1.87; $p < 0.001$), information received from books/magazines ($\beta = 0.700$; 95%CI = 0.181 - 1.219; $p < 0.008$) and daily healthy diet practice ($\beta = 0.38$; 95%CI = 0.26 - 0.49; $p < 0.001$).

Conclusion: School adolescents have insufficient FL . Nutritional unit/center of health sector should encourage more on healthy diet and supporting information through multichannel/sources, such as social media, television, books and family in order to influence the adolescents' capacity to access healthy food for more.

Keywords: Health Literacy, Food Consumption, adolescent

SS 11

The Relationship between Health Literacy and Preventive Behavior of Coronary artery Disease among People in Tanod Subdistrict, Non Sung District, Nakhon Ratchasima Province, Thailand

Tanida Phatisena, Kanchanarat Saengvanangkul, Pornthip Niyomrat, and Supicha Saeang Angela Y. M. Leung
Faculty of Public Health, Nakhon Ratchasima Rajabhat University, Thailand

Background: Coronary heart disease is a public health problem that is the reason why most of people in the world

died. Health literacy is the ability and skills to access knowledge health that will lead to communication with others to increase expertise and able to analyze the decision to choose which is good for their health. If people have a low level of health literacy about coronary heart disease, then they will be health behaviors at low levels as well.

Objectives: To study the relationship between health literacy and preventive behavior of coronary heart disease.

Method: This study is cross sectional study. The sample group were 340 people, aged 35-59 years in Tanod Subdistrict, Non Sung District, Nakhon Ratchasima Province. Sampling was used the stratified random sampling method. Data were collected by questionnaires. Data were analyzed using frequency, percentage, mean, standard deviation, and chi-square test.

Results: The results showed that majority was 62.6 % female, the average age was 46.4 years. Most of the sample group had health literacy at the moderate level in 71.2 %. When considering each aspect, it was found that cognitive skills and decision skills were at a high level while access skills, communication skills and media literacy skills were at a moderate level but self-management skills was at a low level. Preventive behavior for coronary heart disease was at a moderate level in 36.5 %. Health literacy has a positive relationship with cardiovascular disease prevention behaviors with statistical significance. (p -value $< .001$)

Conclusion: Relevant agencies should organize activities to promote health literacy in all six elements and prevention of coronary heart disease to people aged 35-59 years in order to prevent coronary heart disease, which is a public health problem.

Keywords: health literacy, preventive behavior, coronary artery disease

SS 11

Health information seeking behavior and related factors among adults in Hue city, Vietnam

Anh Nguyen Dac Quynh 1, Tuan Nguyen Minh 1, Minh Nguyen Ky Nhat 1, Sy Tran Dinh Khanh 1, Huong Ngo Thi Dieu 2.

1. Student, Faculty of Public Health, Hue College of Medicine and Pharmacy, Hue University, Vietnam
2. Lecturer, Faculty of Public Health, Hue College of Medicine and Pharmacy, Hue University, Vietnam

Background: Nowadays, the material life of human beings is increasingly enhanced, people have very different concerns than the past. Some of the most important issues are health care, disease prevention and prolongation of life. To meet that needs, Health information seeking is gradually becoming an indispensable demand and playing a very important role in the social life.

Objectives: (1) To describe Health Information Seeking Behavior (HISB) and (2) To examine related factors influencing HISB among study participants. Methodology: This was a

cross-sectional study conducted over a 6-month period, from 07/2018 to 01/2019. Samples were 814 adults aged from 18 to 89 from 4 various wards in Hue City, Thua Thien Hue province, Vietnam. Multivariate logistic regression was used to determine the related factors of HISB.

Results: Study indicated that 77.0% of participants had needs and had practiced HISB. Of these, merely 32.3% had right knowledge about this behavior. Medical staffs were considered as the most reliable source of information (75.3%), but only 47.4% of people had accessed to this channel. The most popular source of information is Internet (62.7%). Health information topics which were highly sought include: signs of disease (78.6%), treatment strategies (77.5%) and nutrition

Session 12: Health Literacy in health promotion

SS 12

Health literacy for early dementia diagnosis

Sheng-Pin Changlai

Head of Nuclear Medicine Department

Landseed International Hospital ,

Zhong Li District, Taiwan, ROC

Alzheimer disease (AD) is the most common age-related neurodegenerative disease in the world. In the United States, approximately 5.5 million individuals have dementia due to AD. AD is the sixth leading cause of death in the country. AD places a significant burden not only on persons affected by the disease, but also their families, with more than 15 million caregivers providing an estimated 18.2 billion hours of care in the year 2016. Alzheimer's disease typically progresses slowly in three general stages-mild (early stage), moderate (middle stage), and severe (late stage). Amyloid A β plaques is neuropathological hallmarks of Alzheimer disease.

Amyloid Positron Emission Tomography (Amyloid PET) detects amyloid plaques in the brain to enhance early diagnostic accuracy of mild cognitive impairment (MCI), and also change the clinic management for patient with cognitive impairment. Amyloid Positive patients: AD diagnosis increased from 80.3% pre-PET to 95.5% post-PET Amyloid Negative patients: AD diagnosis decreased from 71.5% pre-PET to 10.2% post-PET (JAMA. 2019 Apr 2;321(13):1286-1294) Taiwan FDA has approved the Amyloid PET tracer drug on June of 2019, more than hundred patients and health persons examined within two months and expected more than 2000 examines in the first year with 20% increasing in following year.

SS 12

Associated factors of hypertension in women and men in Vietnam: a cross-sectional study

Tran Quoc Cuong 1, Nguyen Huu Quyen 1, Le Van Bao 2, Nguyen Anh Tuan 2, Vo Van Thang 3, Nguyen Minh Quan 4, Shwu-Huey Yang 5,6,7, Tuyen Van Duong 5,*

1 Department of Anesthesiology, Thu Duc District Hospital, Ho Chi Minh City 713-11, Vietnam; quoccuong.mph@gmail.com

(75.9%). The related factors affecting the HISB of people were: education (OR= 0.261; 95%CI: 0.174–0.392), self-reported health status (OR= 2.285; 95%CI: 1.466–3.563), doctor-reported health status (OR= 1.764; 95%CI: 1.126–2.762) and knowledge about HISB (OR= 4.103, 95%CI: 2.292–7.346).

Conclusions and Recommendations: The demand for health information of people is high. Relevant ministries and agencies should launch more positive policies for people to access the official health information sources that are appropriate for their health status.

Keywords: Health Information Seeking Behavior (HISB), adults, individual demand, Vietnam

(T. Q. C); huuquyenhm@gmail.com (N. H. Q);

2 School of Public Health, Military Medical University, Hanoi 121-08, Vietnam; ngabaott@gmail.com (L.V.B.); tuanytcc_hvqy@yahoo.com (N.A.T.);

3 Institute of Community Health Research, Faculty of Public Health, College of Medicine and Pharmacy, Hue University, Thua Thien Hue 491-20, Vietnam; vovanthang147@hueuni.edu.vn;

4 Director Office, Thu Duc District Hospital, Ho Chi Minh City 713-11, Vietnam; quan_minhnguyen@yahoo.com;

5 School of Nutrition and Health Sciences, Taipei Medical University, Taipei 110-31, Taiwan; sherry@tmu.edu.tw (S.H.Y); duongtuyenvna@gmail.com (T.V.D.);

6 Research Center of Geriatric Nutrition, Taipei Medical University, Taipei 110-31, Taiwan;

7 Nutrition Research Center, Taipei Medical University Hospital, Taipei 110-31, Taiwan.

Background: Hypertension is a direct cardiovascular disease risk. It causes a heavy burden to healthcare system globally. We aim to assess hypertension occurrence and its associated factors among women and men in Vietnam.

Methods: A cross-sectional study was conducted from January to February 2019, on 2203 community-dwelling women and men aged 18 years or above. Participants' characteristics, comorbidity, behaviors, and physical measures were evaluated. Hypertension was classified as systolic/diastolic blood pressure \geq 140/90 mmHg, or using anti-hypertensive medication. We analyzed data using logistic regression models.

Results: The prevalence of hypertension was 24.3% (26.3% in women, 41.0% in men). For women, older age (odd ratio, OR, 6.80~12.41; $p < 0.001$), income above poverty line (OR, 0.64; $p = 0.008$), diabetes comorbid (OR, 2.98; $p < 0.001$), added salts consumption (OR, 1.80; $p < 0.001$), overweight/obesity (OR, 1.64; $p = 0.005$), abdominal obesity (OR, 2.07; $p < 0.001$) were associated with hypertension. For men, older age (OR, 2.67~5.92; $p < 0.001$), diabetes comorbid (OR, 2.25; $p = 0.010$), smoking (OR, 1.38; $p = 0.046$), and overweight/obesity (OR, 2.18; $p < 0.001$) were associated with hypertension.

Conclusions: Hypertension is prevalent in Vietnamese people.

The associated factors of hypertension are varied by gender.

Keywords: hypertension; added salts; older age; diabetes; overweight; obesity; abdominal obesity; smoking; poverty; Vietnam.

SS 12

Health Literacy of Patients Attending Cardiac Rehabilitation

Alison Beauchamp 1,4, Robyn Sheppard, Fran Wise 5,6, Alun Jackson 1,7,8.

1. Australian Centre for Heart Health, Melbourne, Australia;
2. Department of Medicine – Western Health, University of Melbourne, Melbourne, Australia;
3. Australian Institute for Musculoskeletal Science (AIMSS), Melbourne, Australia;
4. Monash University School of Rural Health, Moe, Australia;
5. Cardiac Rehabilitation Unit, Caulfield Hospital, Australia;
6. Monash University/ Epworth Monash Rehabilitation Medicine Unit, Australia;
7. Faculty of Health, Deakin University, Geelong, Australia;
8. Centre on Behavioural Health, University of Hong Kong, Hong Kong PRC.

Background: Cardiac rehabilitation (CR) is effective at reducing further cardiac events. However, drop-out rates are high, and maintenance of behavioural change post-CR is challenging. An important enabling factor in health decision-making and empowerment is that of 'health literacy', defined as the ability to find, understand and use information to maintain health. Health literacy may influence self-management of cardiac risk, yet few studies have explored this association. Further, little is known about whether health literacy changes during CR. An understanding of the health literacy of CR program attendees, including changes over time may allow CR professionals to tailor the content and delivery of information they provide.

Objectives: This study aimed to describe health literacy among CR attendees; first to describe the health literacy profiles of people commencing CR and second, to examine health literacy changes between program entry and completion.

Method: This was a pre-post study design. CR attendees in Melbourne, Australia completed the health literacy questionnaire (HLQ) at program admission and completion. The HLQ provides a multidimensional description of health literacy across nine scales. Cluster analysis grouped participants according to their health literacy profile. Effect sizes were used to determine changes in HLQ scores over time. Post-program interviews explored the role of health literacy in participants' recovery.

Results: Sixty participants completed baseline data collection and 38 post-program. Mean age was 60.3 years (11.7), and 38.3% had myocardial infarction and/or percutaneous coronary intervention. Approximately 18% of participants did not complete the program. Five health literacy clusters were

revealed. The cluster most likely to drop-out were confident users of the health system who reported good support for health. The cluster least likely to drop-out reported lower confidence in their ability to find or use health information and navigate services. In relation to health literacy changes between program entry and completion, information-seeking ability improved over time, but no other health literacy improvements were seen.

Conclusion: There is a wide range of health literacy profiles in people attending CR, and this may impact on their decision to complete the program, and their engagement with self-management in the longer-term. CR attendance may be associated with improvements in some aspects of health literacy. Overall, findings suggest that CR programs should consider a variety of approaches to meet the diverse health literacy needs of attendees.

Keywords: Health literacy, cardiac rehabilitation, cluster analysis, self-management.

SS 12

An initial assessment of awareness and participation of doctors and nurses with patients on Health promotion activities at E hospital, Vietnam.

Ngoc Thi Do, Anh Nguyet Do, Ha Thu Le
E Hospital, Hanoi, Vietnam

Background: In the future, health care services will be challenged by an increasing number of chronic diseases. This prompts a need to focus on and implement a health promotion approach in the chronic patients' nursing. Health Promotion Hospital project has organized by WHO in over 700 hospitals, 36 countries from Europe and Asean since 2014. Health promotion at hospital is focused on such as well treatment as prevention of diseases. In Vietnam the non-contagious disease group as accidents as injuries are increasing fast. The General E Hospital has administrated high rate of patients with chronic diseases. In 2006 the E hospital has joined health promotion network. The research to evaluate how the activities of doctors and nurses on the translation of knowledge of healthy lifestyle advice into patients practice.

Objectives: Assessing the awareness and participation of health promoting hospital activities of patients and medical staffs in E hospital. Identify high risks factors of this area for further improvement and making effective recommendations.

Method: A cross-sectional survey and quantitative analysis design was used including 370 in-patients and 147 doctors, nurses in the E hospital, 2013. The questionnaires were developed based partly on the WHO guideline. Data was collected during an action research process. Data were analyzed with regard to a framework of questions.

Results: The health education activities have been added to the regular tasks, 85% of medical staffs had trained for patients in health education sessions. Health education for the patients is the main stream in Health promotion. More than 81,6% of inpatients were instructed to use medication, most

of them (81%) can do right at home. But the chronic patients performed right care by themselves at home had just 32%. After being advised the risk of smoking that 28.9 % of patients give up smoking, the statistical evidence was significant. The large number of chronic patients as the hypertension, diabetes, kidney failure, hepatitis do not have enough sufficiency and based knowledge to take care by themselves at home.

Conclusions: Health Promotion is very important responsibility of nursing care in hospital. Majority of patients have participated and received health promotion information and positive impact have been achieved. We need to find out how to enhance competency of nurses on this area. Furthermore, the chronic patients should be improved the capacity to extend their scope of health care management. It is very important to have health care network that has connected from medical expert in Hospital with primary health care in community.

Keywords: Health promotion, education, patient, doctor and nurse, self – care.

SS 12

Outcomes at the Neonatal Intensive Care Unit, Eastern Regional Referral Hospital, Monggar Bhutan: A Retrospective Cohort Study

Tulsi Ram Sharma 1, Phillip Erbele 2, Hari Prasad Pokhrel 3, Pema Lethro 4, Tshering Dhendup 5, TandinZangpo 6

1. Eastern Regional Referral Hospital, Monggar, Ministry of Health, Bhutan
2. Faculty of Nursing and Public Health, KGUMSB, Thimphu, Bhutan
3. Gidakom Hospital, Ministry of Health, Thimphu, Bhutan
4. Reproductive, Maternal and Neonatal Health Program, Ministry of Health, Bhutan
5. Policy and Planning Division, Ministry of Health, Thimphu, Bhutan
6. Department of Public Health, Ministry of Health, Thimphu, Bhutan

Background: Globally 2.6 million neonates die every year, with more than one third of these deaths occurring within 24 hours of birth. Most neonatal deaths are preventable, thus the concept of health literacy among the population is indispensable. The scaling up of Neonatal Intensive Care Unit (NICU) services in developing countries has shown to improve survival rates.

Objectives: The study aimed to determine the mortality rate, and correlate the general and clinical characteristics with the outcomes of neonates admitted in the NICU at the Eastern Regional Referral Hospital Monggar, Bhutan from 2015 to 2017. The study also aims to create health literacy among the identified vulnerable population groups.

Methods: Demographic data, neonatal and maternal variables were extracted for all NICU admissions from 2015 to 2017. Descriptive and analytical statistics were reported as

frequencies, percentages, median, adjusted OR, 95% CI and p values respectively.

Results: The mortality rate was 12.31% and 2.40% were referred out to the National Referral Hospital for tertiary care. Neonatal jaundice (49.55%), neonatal sepsis (41.74%), and prematurity (32.43%) were the three most common diagnoses. Neonates with low birth weight (<2500 grams) were 3.68 times (adjusted OR 3.68; 95% CI: 1.39-9.77) more likely to die compared to normal birth weight neonates and mechanically ventilated neonates were 35.85 times (adjusted OR 35.85; 95% CI: 13.12-97.87) more likely to die compared to those who did not require mechanical ventilation. The main causes of mortality were neonatal sepsis (34.15%), prematurity (29.27%) and birth asphyxia (21.95%).

Conclusion: The mortality rate at the NICU, Eastern Regional Referral Hospital is 12.31%. The study recommends to establish intermediate phototherapy/Kangaroo Mother Care/special baby care unit in the hospital to improve the quality of new born care.

Keywords: Outcomes, Neonatal Mortality, Neonatal Intensive Care Unit, Bhutan

SS 12

How critical health literacy and self - sufficiency economy theory contribute to community development?

Saranrittichai, Kesinee 1, Wichai Ausawapak 2, Tiptiya Heangsorn 3, Ampornpan Teeranut 4

1. Assistant Professor Dr., Faculty of Public Health, Khon Kaen University, Member of Research and Training Center for Enhancing Quality of Life of Working-Age People, Thailand.
2. Doctors. Director of Nampong hospital, Khon Kaen Province, Thailand.
3. Professional nurse, Nampong hospital, Khon Kaen, Thailand
4. Associated Professor Dr., Faculty of Nursing, Khon Kaen University, Director of Research and Training Center for Enhancing Quality of Life of Working-Age People, Thailand.

Background: Sufficiency economy is not a theory about how the economy of a country works, but rather a guide for making decisions to produce the benefit outcomes to development. To achieve sufficiency, an application of knowledge with due consideration and prudence is essential for creating balance and in coping appropriately with critical challenges arising from extensive and rapid socioeconomic, environmental, and cultural changes in the world. Critical health literacy is characteristics of advanced personal skills on access to information, appraise information, making decision, use information for health management including effective interaction with other and political action for community development. How critical health literacy and self - sufficiency economy theory contribute to community development need to be examined.

Objectives: This qualitative research aimed to evaluate the effects of the application of critical health literacy and self - sufficiency economy theory on community development

Method: Participants were: 1) a total of 23 outstanding accredited health care personnel, 2) community leaders, 3) community health volunteers, and 4) community people living in each community. The 23 communities were both in urban and rural area which were the work places of outstanding accredited health care personnel. Data were collected by using 1) in-depth interview with 23 accredited health care personnel individually, 2) focus groups discussion with community leaders, health volunteers and community people in each community separately, participants and non-participant observation. Data collection was done simultaneously with data analysis. Data were analysed by using descriptive statistics, content analysis and comparative method of analysis.

The application of critical health literacy and self-sufficiency economy theory project included: 1) development of the application of self-sufficiency economy theory curriculum, 2) participation in the curriculum by learning and practicing on improving health and economic status, 3) empower community people to practice on the application of self-sufficiency economy theory under their own contexts, 4) monitoring what had been done and what happened.

Results: It was found that community development were composed of 2 aspects: process development and outcomes

Session 13: Health Literacy and Translational Research in MCH

SS 11 KEYNOTE

Transforming doctoral research into practical resources to improve health literacy of maternal and child health workers in Vietnam

Michael P Dunne^{a, b}, Thi Vinh Nguyena, Huyen Phuc Doa^{*}, Thi Minh Lea, Ha Hai Lea, Thang Van Voa, b

^a School of Public Health and Social Work, Queensland University of Technology, Brisbane, Australia. m.dunne@qut.edu.au

^b Institute for Community Health Research, Hue University, Viet Nam.

Background: A significant problem globally is that there is inadequate translation of research evidence into clinical training and practice. Health professionals often complete Masters or PhD research that adds to theoretical knowledge in journal articles and theses, but does not contribute directly to improving health care. Much research lies dormant and has little beneficial impact for society. A key task is to transform this research so that it can be applied to Continuing Professional Education (CPE)

Methods: We will describe a new initiative called TRICEP: Transforming Research Into Clinical Education and Practice. TRICEP commenced by focusing on five thematically related PhD and postdoctoral projects conducted recently in Vietnam to study sensitive aspects of Maternal and Child Health. The research is examining: a) unmet health care needs of pregnant women with disabilities; b) the prevalence and determinants of violence against women during pregnancy; c) barriers to implementation of laws and development of health care services for women who are victims of domestic violence; and d) needs for mental health care and support for women during and after pregnancy. Across these projects, there has

development. Process development was composed of: 1) raising awareness of community people's problems and needs, 2) empower community people to do what they would like to do for their better health and ways of living, 3) monitor and evaluate of what had been done and what happened, 4) local policy development. Outcome development was composed of: 1) better health outcomes, 2) family happiness, 3) improve economic status, 4) community learning center establishment, and 5) Rule for community.

Conclusion: It is suggested that introducing critical health literacy into self-sufficiency economy theory can improve holistic health and economic status of community people. To increase critical health literacy is not only increasing individual skills to act on information but also increasing interpersonal skills within group and community. In addition, social health determinants under community own context and ways of living of community people are important factors contributing to not only effective health promotion but sustainable development on holistic health and community.

Key words: self-sufficiency economy, critical health literacy, empowerment, family, community development, sustainable, holistic health

been approximately 20 person-years of in-depth research activity, and we have a growing number of scientific publications. The important task now is to convert this new knowledge into practice.

Results: We will describe the process being applied in TRICEP and show examples of how we are transforming the research into CME/CPE resources. Our work is focused initially in Hue University of Medicine and Pharmacy and associated health care services in central Vietnam, with technical support from Queensland University of Technology in Australia.

Conclusions: This is a work-in-progress. We will outline the approach taken and discuss the challenges we have had to overcome when transforming technically complex scientific research into materials and tools that are useful for in-service and pre-service training of health professionals.

Keywords: Maternal and child, health literacy, transforming research, clinical education, Vietnam

SS 13

Association of health literacy of mothers with their decision on screening for autism spectrum disorder (ASD) in children aged under 3 years old in Vietnam

Pham Hai Thanh ², Trinh Thi Mai Le ², Luu Ngoc Minh ¹, Nguyen Thi Huong Thao ², Do Thi Thanh Toan ¹, Dinh Thai Son ¹, Luu Ngoc Hoat ¹, Nguyen Thi Thu Huong ¹, Pham Thi Hong Hanh ², Duong Thi Trang ², Tran Thi Thuy Linh ², Nguyen Thi Thu Hoai ², Le Thi Hoai Anh ², Hoang Thi Ngoc Anh ³.

1. Department of Bio-statistics and Medical Informatics, Hanoi Medical University

2. Hanoi Medical University students

3. Hanoi University of Public Health

Background: Autism spectrum disorder (ASD) can be screened early, particular, children under 3 years old. Screening provides a standardized process to ensure that children are systematically monitored for early signs of ASD to promote earlier diagnosis.

Objective: This study was conducted in order to describe decision's mothers on screening for autism spectrum disorder in children under 3 years old, and to examine how characteristics, health literacy of mothers and demographic of children are associated with the decision on screening for ASD in children.

Method: This study was a cross-sectional study. Survey was conducted with 389 mothers with children aged under 3. The independence variables including mothers' demographic, characteristics of children were collected by a questionnaire, and health literacy of mothers was collected by HLS-EU-Q47 questionnaire (Cronbach's Alpha total questionnaire was 0.947). The dependent variable was decision on screening for ASD in children. The logistic regression model was used to identify factors affected with mothers' decision on ASD screening. Bayesian model averaging (BMA) was used for model selection.

Results: There was 44.47% of mothers decided to screen for ASD in their children. Age of children, monthly examination and some variables of health literacy had been selected into logistic model by BMA. Logistic model showed that all of these factors were associated with making decisions on taking ASD screening among mothers. All these statistics were significant (p -value < 0.05).

Conclusion: The study's findings demonstrated that almost half of mothers accepted their children screening for ASD. It also showed that several characteristics of children and health literacy of mothers were associated with mothers' decision on screening for ASD in children.

Keywords: Health literacy, autism spectrum disorder, decision on screening, mothers, Vietnam

SS 13

Health literacy of parents with autistic children in Hanoi in 2018: a cross-sectional study and a quantitative study.

Do Thi Thanh Toan, Nguyen Huu Thang, Nguyen Ngoc Khanh, Pham Hai Thanh, Nguyen Ha Lam, Nguyen Minh Hoang
Hanoi Medical University, Hanoi, Vietnam.

Background: There is a limited understanding of autism spectrum disorder (ASD) in Vietnam. A study showed that the rate of children with ASD in Hanoi was estimated in 2007 was higher 50 times than in 2000.

Objectives: To describe the behavior of parents and to analyze some factors related to using care services for ASD children in Hanoi, 2018.

Method: Firstly, a cross-sectional study was conducted on 121 parents with ASD children in Hanoi using a questionnaire. Next, a qualitative study (QS) using in-depth interviews was

conducted on 10 parents and 4 care providers of ASD children. **Results:** Regarding the average point of seeking: Searching the internet (3.48; 95% CI: 3.25 - 3.71) and information from co-workers (3.24; 95% CI: 2.98 - 3.50) were the most prevalent sources of seeking information. Prestige of the provider (4.31; 95% CI: 4.16 - 4.46) and knowledge, attitude, practice of care workers (4.25; 95% CI: 4.10 - 4.41) were the most searched criteria. From the QS, most parents went to the National Hospital of Pediatrics for initial examination, then searched the Internet. The average point of using: Self-care (4.62; 95% CI: 4.49 - 4.75) was the main choice. In terms of educational services (ES), the highest point was specialized schools (3.18; 95% CI: 2.82 - 3.45) and the lowest point was home care without specialized caregivers (1.62; 95% CI: 1.40 - 1.84). Most parents used traditional medicine facilities (2.93; 95% CI: 2.62 - 3.25). Some factors related to seeking and utilizing care for ASD children: in terms of ES: parents with female children preferred to using ES versus parents with male children (Coef=0.24; 95% CI: 0.02 - 0.46). Furthermore, the older a child was, the less likely the parents will use ES (Coef=-0.01; 95% CI: -0.02 - -0.0002). In terms of HS: The more interested parents were in the search criteria, the more regularly they would use health services (Coef=0.06; 95% CI: -0.10 - 0.24). Late diagnosis and treatment from doctors result in a struggle for the parents in selecting health services for their children (Coef=0.29; 95% CI: -0.53 - -0.04). The QS also indicated the similar results. Parents with high level of education (Coef=0.32; 95% CI: 0.01 - 0.63) used services more frequently, rural and center area affected to behavior of parents (Coef=0.32; 95% CI: 0.01 - 0.63). Our findings in quantitative study also showed the similar results to the cross-sectional study

Conclusion: The findings of this study concluded that the health literacy of a parent is associated with their education levels, their children's age and sex, and the doctor's diagnosis. **Key words:** Autism children, parent behavior, health literacy, ASD.

SS 13

Effects of Health literacy and Self-Efficacy Program for Premature Pregnancy Prevention among Thai Female Adolescents

Panee Banchonhattakit 1, Nattaya Keawpipop 2
1. Faculty of Public Health, Khon kaen University
2. Health Promotion Center Region 5, Ratchaburi, Thailand

Background: Currently, premature pregnancy in adolescent dramatically increases many countries in Asia that effect to unwanted abortion. Adolescents in schools should be prevented and reduce teenage mother problem. So the concept of health literacy add to this innovative program for increasing the procedural knowledge and judgment skills including self-efficacy.

Objectives: This study investigated the Health literacy (HL) and Self-Efficacy (SE) Program for premature pregnancy prevention among Thai female adolescents.

Method: This is a quasi-experimental research. The sample was the 8th grade students who were multistage random sampling in a province. Inclusion criteria and finally 39 students in each groups of an experimental and a comparison groups were selected. The experimental group received a combined concept of HL with SE, that composed of accessibility, knowledge, communication, decision making, self- management, and literacy media including SE concept. The program composed of many activities such as group discussion, increasing knowledge with media, games, brainstorming, role-play, and modeling. The control group received health education and information in normal classroom. Self-administered questionnaire was done by students. The duration of the program was 12 weeks. Comparative mean difference within and between groups were analyzed by paired t-test and independent t-test at 95% confidence interval.

Results: The results revealed that, after the experiment, the experimental group had significantly mean scores of HL in terms of accessibility, knowledge, communication, decision making, self- management, and literacy media about premature pregnancy prevention higher than before intervention and higher than the comparison group. (p-value<0.001).

Conclusion: So, this program could increase health literacy and self-efficacy for premature pregnancy prevention in adolescents and should be educate to other adolescents.

Keywords: Health literacy, Self-Efficacy, School-based intervention, Premature Pregnancy Prevention

SS 13

Autistic in Hanoi, Vietnam: Knowledge about early detection autistic among teachers of preschools.

Tuan Ngo Tri, Vu Dam Trong Anh, Duy Nguyen Cao, Thanh Pham Hai.

Hanoi Medical University, Hanoi, Vietnam.

Background: In Vietnam, the prevalence of children with Autism Spectrum Disorder (ASD) is rising. The ability of preschool teachers to detect abnormal developments and provide recommendations for parents and preschool staffs is extremely important.

Objectives: The objective of the study is to determine which knowledge needs to improve between different levels of knowledge of early detection of autistic children among preschool teachers in Hanoi. We also identify the factors affecting to each levels of the knowledge of study subjects.

Method: This was a cross sectional study conducted among 208 teachers at Hanoi, Vietnam. We used a two-part self-developed questionnaire: Part 1 had 20 true/false questions to test your knowledge of ASD early detection. Part 2 had 6 multiple choice questions (26 options) to test knowledge about general ASD and compare differences between

knowledge clusters for early detection. Correlation analysis was used general knowledge and knowledge of early detection of ASD. The study had preferred the Two-steps cluster analysis to identify the level of knowledge about early detection of ASD. We compared scores between clusters by ANOVA test. Chi square and ANOVA analysis were performed to comparing the different of participants' demographics between clusters was used to assessment the related factors.

Results: Knowledge about general ASD and early detection of ASD were correlated (p-value <0.01). There were 4 clusters in the sample study. Cluster 1 (20.7%) – Very bad knowledge - had teacher 's right answers about general knowledge range score focus on 26 - 50% (69.8%) and below 25% (88.4%) of the questionnaire. Cluster 2 (29.8%) – Bad knowledge – had teacher's right answers about general knowledge were 26-50% (100%) and most of that about early detection knowledge were 26-75% (95.2%) score. Cluster 3 (29.8%) – Normal knowledge – had 85.5% teachers s' general knowledge answer score were 51-75% and 67.7% that were 26-50%. Cluster 4 (19.7%) – Good knowledge - had 100% those were over 50% total score. There was no difference about pre-teacher's demographic between 4 clusters.

Conclusion: Our study had found out the evidence of which knowledge of early detection ASD was different level preschool teachers in Hanoi, Vietnam. Improving the health literacy of preschool teachers about ASD should be combined with general knowledge training and knowledge of early detection. There is no difference between teacher s' clusters.

Keywords: autism spectrum disorders, early detection, preschool teacher, knowledge, cluster analysis, Vietnam.

SS 13

Current situation on the prenatal health care utilization among new mothers in the mountainous district.

Tran Dinh Trung 2, Doan Ngoc Dinh , Nguyen Thi Hoai Thu 1, Bui Thi Han 1, Le Thi Le Trinh1, Ngo Duc Minh 1.

1. Hanoi Medical University, Vietnam

2. Danang University of Medical Technology and Pharmacy

Content: WHO recommended that pregnancy women should have at least having 4 times of prenatal care visiting in order to immunization, screen checking during pregnancy period but the utilization of using prenatal care is still low in countryside in Vietnam. This study conducted in total of 347 women who have children under 1 year old in Nong Son, Quang Nam in 2018. In overall, 347 women participated in this study. The study shows that 58.5% of those women who have adequate utilization of prenatal care, 59.8% have adequate vaccination & testing services, 43.8% have adequate services of background check but 49% of those have more than 3 times of using ultrasound screening.

Keywords: prenatal, health care utilization, Vietnam

POSTER PRESENTATIONS

P1.

Increasing Satisfaction on Quality Management at a Dental Public Health School

Yupawadee Chaekulchat 1, Vallerut Pobeeree 2.

1. Faculty of Dentistry, Mahidol University, Bangkok, Thailand
2. Faculty of Public Health, Mahidol University, Bangkok, Thailand

Background: Dental health is one of the important issue for public health. It could cause other health problems to patients. By providing timely and accurate treatments, patients would be relieved not only from prolong suffering, both physically and mentally, but also decrease their expenses and time consuming for such treatments. Approximately 500 previously registered dental patients per day walk into the emergency department without an appointment. The problem was that the wrong medical records were given, and the waiting period was long. Therefore, the school has to develop a plan to improve service on OPD card finding and providing accurate cards to internal staff and dentists in a timely manner.

Objectives: To find current problems and to increase satisfaction among internal staff and dentists who require patient dental files in order to give appropriate treatment. Researchers developed plans and actions to reduce problems and mistakes.

Methods: The researchers used information technology to help alleviate existing problems. Requested patient dental files were put on developed software and registration staff looked for the files. When patient files were found, staff used the developed program to let other internal staff and dentists know. Files were sent to requested units. A questionnaire was sent out to ask internal staff and dentists concerning their satisfaction about the newly developed plans and actions.

Results: Internal staff and dentist satisfaction statistically increased (p -value < 0.05) after executing newly developed plans and actions in order to reduce turnaround time and increase accuracy. Waiting period was reduced. Error regarding incorrect patient medical records was also reduced to 0%. This resulted in the dentists having more time to provide quality services including educating their patients which help them obtained more knowledge on oral health care.

Conclusion: Information technology is important in facilitating dental school management and helps bring health literacy to corporate, examine and disclose problems in quality management with regards to satisfaction. This could bring more gratification to internal staff and dentists who could work more effectively.

Keywords: Satisfaction, quality management, dental school

P2.

Health Literacy on the Predictors for Serious Traumatic Brain Injury from Physical Violence Among African Men in The Gambia

Paul Bass^{1,2}, Edrisa Sanyang³, Mau-Roung Lin¹

1. Graduate Institute of Injury Prevention and Control, College of Public Health, Taipei Medical University, Taiwan.
2. Department of Public & Environmental Health, School of Medicine & Allied Health Sciences, University of The Gambia, The Gambia.

3. Department of Public Health, College of Health and Human Services, Western Kentucky University, USA.

Background: While men are at high risk of serious traumatic brain injuries (TBIs) from physical violence, the health literacy on the risk factors in African men are still unknown.

Objectives: The aim of this study us to identify risk factors for serious TBIs from physical violence among African men in The Gambia.

Methods: Over the 12-month study period, we conducted a matched case-control and cases were male patients aged ≥ 15 years with serious TBI from physical violence. Serious TBI was assessed with the Glasgow Coma Score (GCS) and patients who had a GCS of 3-12 were classified as serious. In total, 96 cases with serious TBI from physical violence, and 384 control patients from two control groups (192 mild TBI controls (mTBI) and 192 nonTBI controls (nTBI)) were recruited from eight emergency rooms located in the Greater Banjul Metropolitan Area, The Gambia. Both sets of control patients were matched by the health facility, date of injury, and age to an index case

Results: Serious TBI patients were mostly young men (77.1%) of age 15-34 years. Nearly 70% of the men were married and in monogamous relationship (56.3%). While 54% of all of perpetrators were friends (49.5%) or family members (4.2%), 46.3% were strangers. Results of the multivariable conditional logistic regression showed that for both mTBI and non-TBI control groups, physical violence that occurred in the night (OR_{mTBI}, 2.22; OR_{nTBI}, 7.00) were significantly associated with the occurrence of serious TBI. Compared to physical violence that occurred at home, those that occurred in the bar/restaurant (OR_{mTBI}, 5.01) were significantly associated with the occurrence of serious TBI. Furthermore, compared to injuries caused by burns/stoning, those that were caused by struck by an object (OR_{mTBI}, 3.98) and fist punching (OR_{nTBI}, 6.37) were significantly associated with the occurrence of serious TBI. Additionally, compared to the non-TBI controls, having smoked cigarettes in the past week (OR_{nTBI}, 3.49) was associated with a serious TBI.

Conclusions: These findings may fill a knowledge gap that will be beneficial for developing effective intervention programs to reduce serious TBIs from physical violence among African men.

Keywords: health literacy, risk factors, traumatic brain injury, physical violence, Africa

P3.

Satisfaction in TB care services at a primary care unit in Bangkok,Thailand

Rattagan Yanaso 1, Somchart Torugsa 2, Vallerut Pobkeeree 2.

1. Graduate student in Master of Science Program in Hospital Administration, Faculty of Public Health and Faculty of Graduate Studies, Mahidol University
2. Department of Public Health Administration, Faculty of Public Health, Mahidol University.

Background: Client satisfaction is a crucial goal of primary health care service providers to demonstrate how services given to others meet

expectations. The service processes are not only provided to TB patients but also internal clients i.e. top management people and internal staff. Service satisfaction may result in increasing TB treatment adherence for patients or less work stress for TB staff and increase quality of work life for them.

Objects: The study aimed to evaluate client satisfaction at a primary health care unit in Bangkok. The clients included TB patients, top management and internal staff at the unit.

Method: Arranged process management was implemented such as modified work procedure, documented time and volume of TB services, standardized TB checklist for accuracy and quality. The study was cross-sectional and conducted using self-administered questionnaires which were distributed to all TB service staff within the primary care unit coverage, namely 42 TB patients, five top management and four internal staff. Pre and post management performance was measured by Wilcoxon Signed Rank Test.

Results: All satisfaction levels from the three groups of respondents were higher than previous management. However, the only statistically significant group of clients was TB patients (p-value < 0.05).

Conclusions: The results of the study demonstrated a higher level of satisfaction with TB health care services both from the unit's internal and external clients. Nevertheless, the satisfaction results from top management and staff within the unit were not significant, which might be because of lower number of respondents in those groups. Other variables that influenced satisfaction level may include length of arranged process management that was implemented at the unit which could let the implemented management carry out longer. Therefore, there could be health literacy from the research that would help improve TB work in the future.

Key words: TB service , satisfaction , primary health care unit , Bangkok

P4.

What is level of physical activity among secondary school students in Vietnam?

Nguyen Minh Tu 1, Pham Thi Kim Nhung 1, Tran Thi Hoa 1, Nguyen Thanh Gia 1, Phan Van Sang 1, Tran Binh Thang 2.

1. Hue University of Medicine and Pharmacy, Hue city, Vietnam
2. National Cancer Center Graduate School of Cancer Science and Policy, South Korea

Background: Regular physical activity not only gives benefits to health but also prevents non-communicable diseases.

Objectives: A descriptive cross-sectional study was conducted on 613 secondary high school students in Hue City to assess the prevalence of physical activity and to obtain factors related to physical activity of students.

Methods: We, hereby, conducted a cross-sectional survey, which included 613 students aged from 11 years to 14 years in 2 schools named Nguyen Hoang Secondary high school and Nguyen Chi Dieu Secondary high school, which was a representative geography of Hue city (one from the north of city, another one from south of city).

Results: The results showed the prevalence of students had the physical activity level consistent with World Health Organization recommendations was 68.2 %, 95% CI (64.5 to 71.9), the prevalence of students had the sedentary activity level consistent with

recommendation was 18.8%, 95%CI (15.7 to 21.9). Factors were significantly associated with increased prevalence of physical activity of students following encouragement from their parents (OR= 2.0; 95%CI: 1.2-3.3); mode of transportation to school (bike and walk) (OR= 4.4; 95%CI: 2.9-6.7); adequate aware of the importance of physical activity (OR= 6.4; 95%CI: 1.9-20.1). The results showed the sedentary activity time was high.

Conclusion: The findings show that the attention of family, the mode of transportation to school, the awareness of students about the importance of physical activity were factors that can impact on improving their physical activity.

Key words: Physical activity, associated factors, secondary high school students.

P5.

Effects of virtual reality on balance control in older adults

Huang, W. Y., 1,2, Cherng, R. J., 1.

1. Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, Tainan, Taiwan
2. Department of Physical Medicine and Rehabilitation, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan

Background: Balance deficit is one of the key impairments that lead to increased number of falls. Falls are the leading causes of fatal and nonfatal injuries in older adults. Therefore understanding the balance control and how to improve it in older adults is very important in the health literacy. Increasing studies have applied virtual reality (VR) to improve the balance performance in older adults. However, the effect is unclear and remains inconclusive.

Objectives: To examine the effects of VR in improving balance performance in older adults through a meta-analysis to increase the professional's health literacy.

Method: Data were searched from PubMed, MEDLINE, CINAHL, Cochrane and PEDro. The search strategies were "VR or older adults or balance "and "VR or community dwelling elders or balance" and "VR or elders (older) or balance" for articles published until May 31, 2019. Only controlled trials studies that compared VR to Non-VR were included. Berg Balance Scale (BBS) and/or Timed up and go (TUG) were used as measures of balance performance. The quality of these studies was assessed with the Physiotherapy Evidence Database Scale (PEDro).

Results: Thirty-four studies met the inclusion and exclusion criteria. The effect of VR training on BBS was further examined by pooling the data of 6 studies and on TUG by pooling the data of 6 studies. The pooled data showed that VR training improved BBS significantly more than non-VR training (MD=3.31; 95%CI=1.94, 4.69; p<0.00001) The I² statistic of 77 % showed high heterogeneity, therefore the random-effects model was applied. The results also demonstrated a significant improvement of the TUG of VR group training intervention. (MD=-0.21; 95%CI=-0.77, 0.35; p=0.46). The I² statistic of 29% represents low heterogeneity, the fixed-effect model was used. This study showed a significant improvement in balance performance on BBS and TUG in favor of the VR group.

Conclusion: VR is effective to improve balance performance for older adults, but more large-scale trials are needed to provide stronger evidence.

Keywords: health literacy, virtual reality, older adults, balance, meta-analysis.

P6.

Effects of Mental Health Literacy Promotion Program with Positive Psychology Concepts for Promoting Stress Management Behavior among Village Health Volunteers

Watcharin Sauhem 1, Pannee Banchonhattakit 2

Faculty of Public Health, Khon Kaen University

Background: Stress negatively affect to physical and mental health, which is a common cause of suicide around the world.

Methods: This quasi-experimental research aimed to investigate the effects of mental health literacy (MHL) promotion program with positive psychology (PP) concepts for promoting stress management behavior among village health volunteers (VHV). The samples were VHV who were moderate stress level by screening and inclusion criteria were set at age 25 to 59 years old. The sample was randomized were divided into two groups; an experimental and a comparison group of 42 participants in each group. The experimental group received the MHL promoting with PP concepts program that comprised of various activities such as appreciative inquiry, group process, demonstration and practice of stress management. The duration of intervention was 12 weeks. While, the control group did not receive this program. Data were collected before and after by self-questionnaires. Comparative analysis were tested by Paired sample t-test, and independent t-test, 95 % Confident interval and significant setting at level 0.05

Results: The results showed that after the experiment, the experimental group had mean scores of MHL, knowledge and understanding about stress, access to mental health information, media literacy, communication skills, decision making, mental health first aid, and stress management behavior with PP approach higher significantly than before the experiment and higher than the comparison group (p-value < 0.001). Stress level of the experimental group was decreased significantly than before the experiment and the comparison group (p-value < 0.001).

Conclusion: So, this program could reduce stress of VHV and recommended for distribution to other areas.

Keywords: Mental health literacy, positive psychology, stress management

P7.

The Differences Effectiveness of Health Promotion Through Audiovisual Media and Lecture Methods on the Level of Knowledge of Elementary School Children About TB Disease

Monica Trifitriana 1, Rizma Adlia Syakurah 2, Rido Mulawarman 1.

1. Medical Profession Students, Medical Faculty, Sriwijaya University, Indonesia

2. Public Health and Community Medicine Department, Medical Faculty, Sriwijaya University, Indonesia

Background: Indonesia is the number two country for TB incidence in the world. To reduce the morbidity and death rate of tuberculosis cases, WHO issued an END-TB Strategy program that has 3 pillars. Pillar number 2 on the importance of cooperation with government, private stakeholders, and community for the prevention of TB disease, one of them in the form of health promotion. Health promotion has a relationship with improvement of health literacy. Submission of

information on TB disease directly helps to increase the knowledge or literacy of children, but the end result is influenced by the method of information delivery. The application of speech methods and audiovisual media in conveying information has some differences in the process and achievement of students' level of understanding.

Objectives: This study aims to compare the effectiveness of the use lecture methods and audiovisual media in conveying information that can improvement the children about TB literacy.

Methods: This study used quasi experimental design with nonequivalent pretest-posttest (O X O) technique, A total of 136 research subjects were 6th graders at Public Elementary School 205 Palembang and Private Elementary School YWKA Palembang, 68 study subjects in each elementary school were subdivided into two groups, namely the audiovisual media group (n = 34) and the lecture method group (n = 34). Submission of information on TB disease was performed on one day simultaneously in both groups.

Results: the results is the level of understanding for the audiovisual media group was 87.90% while for the lecture method was 83.00% (effective when > 75%) with a value of p < 0.05 about TB literacy.

Conclusion: It was concluded that the delivery of information on TB disease in grade 6 pupils assessed in two schools using audiovisual media and lecture methods were both equally effective, but the effectiveness of the audiovisual media was higher than the lecture method so that audiovisual media is considered better to make the children know about TB literacy than lecture methods.

Keywords: Audiovisual media, Lecture methods, Health Promotion, Health Literacy, Indonesia

P8.

Parental Influences on Medical Students' Self-Efficacy and Career Exploration in Collectivist Culture

Afifa Jasmon 1, Fitria Masturah 1, Nicho Saputra Nugraha 1, Rizma Adlia Syakurah 2, Azzahra Afifah 1, Monica Trifitriana 1.

1. Medical Profession Students, Medical Faculty, Sriwijaya University, Palembang, Indonesia,

2. Public Health Department, Medical Faculty, Sriwijaya University, Palembang, Indonesia

Background: Parents provide the children with directions according to their talents and personal interest. In the collectivist culture, there is a distinctive "power distance" between parents and children. Parents are seen as models and facilitators, because they have a strong influence on their children. Where mostly their guidance were listened and offered the influences on self-efficacy and decisions taken by their children. Many of medical students don't know clearly about their careers, they need to know career literacy to be able to determine their future. Career making decisions also a collective decision, instead of personal decision. This is an entity from Indonesian culture as a collectivist country.

Objectives: The aim of this study was to determine the relationship between the influence of parents' expectations for self-efficacy and career exploration in medical students and make them know about career literacy for their career

Methods: with collectivist culture in four Faculties of Medicine in three provinces: South Sumatra, Jambi, and Bengkulu with 1017 samples medical student by using social cognitive career theory.

Results: The results of this is family influence in medical student's career as their decision. Parents' and elderly's opinions heavily regarded in the collectivist environment.

Conclusion: The findings show the important role between the influence of parents' expectations for self-efficacy and career exploration in children and make them know about their career literacy.

Keywords: Parental Influences, Medical Career, Self-efficacy, Collectivist Cultures, Literacy

P9.

The Relationships of Self Efficacy, Outcome Expectation, Career Intention and Career Exploration in Nursing Student's Career Choice

Azzahra Shinta Intansari 1, Febby Astria 1, Reynold Siburian 1, Sri Wulandari 2, Rizma Adlia Syakurah 3, Monica Trifitriana 1.

1. Medical Profession Students, Medical Faculty, Sriwijaya University,
2. Nursing Study Program Students, Medical Faculty, Sriwijaya University,
3. Public Health and Community Medicine Department, Medical Faculty, Sriwijaya University.

Background: Along with population growth every year there is an increase in the need for health workers, one of them is nursing staff. Nursing students in Indonesia still choose the profession of clinical nursing as the final choice of the nursing school they run. Many of nursing students don't know clearly about their careers, they need to know career literacy to be able to determine their future. Career selection can be influenced by various factors, namely the exposure of students to the nursing profession or other factors such as self efficacy, outcome expectation, career intention, and career exploration to the students themselves.

Objectives: This study aims to determine relationship of self efficacy, outcome expectation, career intention and career exploration in the choice of career and make them know about career literacy for nursing study students in Indonesia with 1000 samples of nursing students.

Methods: This research is an observational analytic study of 1000 samples of undergraduate and profession students of Nurse who have filled out an online questionnaire from March to June 2019. An online questionnaire consisting of a Career Decision Making Self-Efficacy-Short Form (CDMSE-SF), Career Decision Outcome Expectation (CDMOE), Career Exploration Planning or Intention Questionnaire (CEPI), Career Exploration Survey-Revised (CES-R), which has translated and validated. All models are analyzed using the maximum possible estimation of the AMOS application

Results: This research showed that there was a significant relationship with marital status and family income.

Conclusion: The results of this study indicate that self efficacy, outcome expectation and career intention influence career exploration significantly both directly and indirectly in the career choice of nursing students and make them know about their career literacy.

Keywords: Career Choice, Nursing Students, Literacy, Indonesia

P10.

Relationship between Career Self Efficacy, Career Outcome Expectation, Career Intention and Career Exploration in Career Selection Nutrition Science Student

Fidyah Pratiwi 1, Illiyah 1, Rizma Adlia Syakurah 2, Indah Yuliana 3, Reynold Siburian 1, Monica Trifitriana 1.

1. Medical Profession Students, Medical Faculty, Sriwijaya University,
2. Public Health and Community Medicine Department, Medical Faculty, Sriwijaya University,
3. Teaching Staff of Community Nutrition, School of Public Health, University of Sriwijaya

Background: The international world agreed that in 2030, Sustainable Development Goals (SDGs) were goals that needed to be achieved well. Given the current focus of the world and Indonesia, especially on the issue of stunting, namely the high number of malnutrition such as low and short body weight. The existence of a nutritionist in Indonesia is needed to improve the welfare of the community. The increasing number of nutritionists in Indonesia shows that career choices for nutritionists are high in demand by the students. Many of nutrition science students don't know clearly about their careers, they need to know career literacy to be able to determine their future. The career opportunity of the nutritionist are very vast and vary, so that career planning is an important thing that has a major influence on one's future. Career selection itself can be influenced by many factors, namely student exposure to the nutritional science profession or other factors such as self efficacy, outcome expectation, career intention and career exploration for students themselves.

Objectives: By using SCCT, this study aimed to determine the career exploration-related behavior relationship, which consists of career self-efficacy, career outcome expectations, career intention and career exploration and make them know about career literacy for nutritionist

Method: This research is an observational analytic study of 502 samples of nutrition science who have filled out an online questionnaire from July to August 2019. An online questionnaire consisting of a Career Decision Making Self-Efficacy-Short Form (CDMSE-SF), Career Decision Outcome Expectation (CDMOE), Career Exploration Planning or Intention Questionnaire (CEPI), Career Exploration Survey-Revised (CES-R), which has translated and validated. All models are analyzed using the maximum possible estimation of the AMOS application.

Results: This research showed that there was a significant relationship between mother's work and career plans after graduation.

Conclusion: This study concluded that self efficacy, outcome expectation, and career intention influence the career exploration of nutrition science students significantly both directly and indirectly and make them know about their career literacy

Keywords: Career Choice, Nutrition Science Students, Literacy, Indonesia

P11.

Modeling of Career Choice Behaviors in Indonesian Dentistry Students

Fianirazha Primesa Caesarani 1, Febby Astria 1, Rizma Adlia Syakurah 2, Bertha Aulia 3, Reynold Siburian 1, Monica Trifitriana 1.

1. Medical Profession Students, Medical Faculty, Sriwijaya University,
2. Public Health and Community Medicine Department, Medical Faculty, Sriwijaya University,

3. Teaching Staff, Faculty of Dentistry, Sriwijaya University

Background: The increasing number of dentists shows that this profession is one of the most popular career choices in Indonesia. Many of dentistry students don't know clearly about their careers, they need to know career literacy to be able to determine their future. The type of dentist professional development varies so that career planning is an important thing that has a big influence on one's future. The social-cognitive career theory (SCCT) perspective explains that there is a relationship between career self-efficacy, career outcome expectation, career intention and career exploration in the career selection process.

Objectives: By using SCCT, this study aimed to determine the career exploration-related behavior relationship, which consists of career self-efficacy, career outcome expectations, career intention and career exploration in the career determination and make them know about career literacy for dentistry students in Indonesia.

Methods: This research is an observational analytic study of 505 samples of undergraduate and profession students of dentistry who have filled out an online questionnaire from March to June 2019. An online questionnaire consisting of a Career Decision Making Self-Efficacy-Short Form (CDMSE-SF), Career Decision Outcome Expectation (CDMOE), Career Exploration Planning or Intention Questionnaire (CEPI), Career Exploration Survey-Revised (CES-R), which has translated and validated. All models are analyzed using the maximum possible estimation of the AMOS application.

Results: This research showed that there was a significant relationship between having a career plan and father's job.

Conclusion: This study concluded that self efficacy, outcome expectation, and career intention influence the career exploration of dentistry students significantly both directly and indirectly and make them know about their career literacy.

Keywords: Career Choice, Behaviors, Dentistry Students, Literacy, Indonesia

P12.

The effects of integrated outpatient services for people with disabilities on health literacy

Wan-Yun Huang 1, Sheng-Hui Tuan 2, Shu-Fen Sun 1, Min-Hui Li 1, I-Hsiu Liou 1

1. Department of Physical Medicine and Rehabilitation, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan

2. Department of Rehabilitation Medicine, Cishan Hospital, Ministry of Health and Welfare, Kaohsiung, Taiwan

Background: According to the questionnaire of ministry of interior, Taiwan, 68.8% of people with disabilities had regular visits for doctors. However, 57% among them had difficulties to visit the hospital independently. They encountered problems such as registration in the hospital counter or traffic issues. In 2014, We established integrated outpatient services for people with disabilities in our hospital.

Objectives: In this service program, a case manager assessed patients with disabilities and arranged appointment to medical specialties, including internal medicine, physical medicine and rehabilitation, psychiatry and more, according to patients' needs. During the same visit, patients with disabilities could see all specialists they need in one visit session, in one clinic room. The aim of the service program was

to improve the medical quality, to overcome the obstacles during medical visits for patients with disabilities, and to save patients' money.

Methods: From June 2015 to June 2017, there were 2325 people received service counselling and 2279 people applied for the integrated system annually. For age distribution (figure 1), most patients were between 51 and 60 years of age. For disability classification, most of the patients were diagnosed with neuromuscular deficits and related disabilities (figure 2).

Results: In all, there were 689 doctor visits annually. For health-related behavior analysis in the people with disabilities, smoking accounts for 23%, alcohol drinking 13.5% and betel nuts 5% (figure 3). For disease analysis, hypertension accounts for 18.8% . For patients' feedback, satisfaction rate was over 90% in the questionnaire of integrated system.

Conclusion: The effects of integrated outpatient services for people with disabilities in Taiwan showed high satisfaction and save time and medical expenditure of patients. This service can enhance health service quality of people with disabilities.

Keywords: Integrated outpatient services, Disability , Healthy service quality

P13.

Development of a Health Literacy Toolbox for India

Rao, Arathi 1; David, Roubitha 2; Brand H 1,2.

1. Prasanna School of Public Health, Manipal Academy of Higher Education, Manipla, India

2. Department of International health, Care and Public Health Research Institute (CAPHRI), Maastricht University, The Netherlands.

Background: Health Literacy plays a vital role in how well individuals can access the health system and receive quality care. Surveys like the HLS-EU have been developed to assess the health literacy status in individuals and in groups. A magnitude of different health literacy interventions to increase health literacy in individuals and groups have been developed too. But it is unclear how to determine which intervention will work best in a given situation due to the problems of transferability.

Objects: A Health Literacy tool box as an App is in the making which will be able to determine the health literacy status of individuals and groups in India by use of an adapted version of the HLS-EU survey and will include a repository of health literacy interventions fit for the Indian context. The tool will suggest the right intervention for the determined health literacy status of individuals and groups.

Method: The HLS-EU survey will be translated in the main languages spoken in India for the assessment of the health literacy status of individuals and groups. A narrative review of (worldwide) available health literacy interventions was performed to identify which interventions will make sense in the Indian context. An IT based App using Artificial Intelligence is under development.

Results: The narrative literature review could identify only a small number of interventions that are suitable for use in India. They will be integrated in the toolbox.

Conclusion: At the moment there are only a few tools available to identify the health literacy status of individuals and groups and to determine the right interventions at the same time. The Health Literacy Toolbox for India as an interactive App will help to solve this gap.

Keywords: Health literacy, Toolbox, Assessment, Intervention, Transferability

P14.

Sleep quality literacy in cancer patients and its related factors

Mai P. Nguyen, Nhan T.L Nguyen, Ngoc B.T Nguyen, Thu D.T Nguyen, Dung X. Ho

Hue University of Medicine and Pharmacy, Hue University Hospital

Background: Cancer is the second leading cause of death globally and one of the most common non-communicable diseases in Vietnam. Sleep disorders such as difficulty in falling asleep, maintaining sleep, poor sleep efficiency, early awakening and excessive daytime sleepiness is among the adverse effects that are experienced by patients with cancer most frequently but they are widely underdiagnosed.

Objectives: This study evaluated the quality of sleep and its associated factors among cancer patients.

Method: The cross-sectional study was conducted on 61 cancer patients in Oncology Department, Hue University Hospital. Sleep quality [Pittsburgh Sleep Quality Index], severity of anxiety and depression [Hospital Anxiety Depression Scale] and pain [Visual Analogue Scale for Pain] were accessed in the present study.

Results: The study population consists of 61 patients with mean age of 60.69. The mean global PSQI was 11.64 and 68.82% had poor sleep quality. There was no statistically significant differences between PSQI mean score in terms of age, gender, cancer location ($p>0.05$), while patients receiving chemotherapy/radiotherapy had poorer sleep quality ($p<0.001$). Patients with the severity of pain had higher PSQI score ($p=0.003$) Factors associated with global PSQI score in univariable analyses were anxiety ($r=0.594$), depression ($r=0.594$) and pain ($r=0.492$).

Conclusion: Sleep disorders are very common among cancer patients. Chemotherapy/radiotherapy, anxiety, depression and pain are factors associated with sleep problems in these patients. Other demographic variables and clinical features of cancers did not affect the sleep quality.

Keywords: quality of sleep, cancer patients, literacy, anxiety, depression

P15.

High carbonated soft drink consumption is associated with externalizing and internalizing behaviour among in-school adolescents in six Southeast Asian countries

Karl Peltzer 1, Supa Pengpid 2

1. Social Aspects of Public Health (SAPH) Research Programme, Human Sciences Research Council, Pretoria, South Africa

2. ASEAN Institute for Health Development, Mahidol University, Salaya, Phutthamonthon, Nakhon Pathom, Thailand.

Background: Carbonated soft drink consumption has been associated with risk behaviour in adolescents in high-income countries, but there is lack of evidence of this association in cross-nationally representative samples of adolescents in low- and middle-income countries.

Objectives: The investigation aimed to estimate the association between carbonated soft drink consumption frequency and externalizing and internalizing behaviour among in-school adolescents in six Southeast Asian countries.

Methods: Cross-sectional survey data were analysed from 36173 school-going adolescents (median age 14 years, interquartile range= 3) from Bangladesh, Indonesia, Laos, Philippines, Thailand and Timor-Leste that took part in the "Global School-Based Student Health Survey (GSHS)" in 2014-2015.

Results: In all six Southeast Asian countries, the study found a prevalence no soft drink consumption in the past days of 23.9%, less than one time a day 38.8%, once a day 19.9% and two or more times a day 17.5%. In the final adjusted logistic regression analysis, any and higher frequency of soft drink consumption (one and two or more times a day) was associated with attacked, in physical fight, injury, bullied, school truancy, current tobacco use, current alcohol use and lifetime drunkenness. In addition, the consumption of two or more times soft drinks a day was associated with lifetime cannabis and amphetamine use. Higher frequency of soft drink consumption (one or two or more times a day) was associated with loneliness, anxiety, suicide ideation, suicide plan and suicide attempt.

Conclusions: Findings suggest that carbonate soft drink consumption is associated with a number of externalizing and internalizing health risk behaviours. Health literacy intervention programmes should target the reduction of soft drink intake in this adolescent population

Key words: soft drink consumption, risk factors, literacy, adolescents

P16.

Health literacy among mothers of children under 3-year: A latent class analysis

Luu Ngoc Minh 1, Nguyen Thi Huong Thao 2, Pham Hai Thanh 2, Do Thi Thanh Toan 1, Dinh Thai Son 1, Luu Ngoc Hoat 1, Nguyen Thi Thu Huong 1, Tran Thi Thuy Linh 2, Pham Thi Hong Hanh 2, Duong Thi Trang 2, Trinh Thi Mai Le 2, Nguyen Thi Thu Hoai 2, Ngo Van Tu

1. Department of Biostatistic and Medical Informatics, Hanoi Medical University

2. Hanoi Medical University students

3. Hanoi University of Public Health

Background: Health literacy refers to the degree to which people can access and understand health information, as well as communicate their health needs to service providers. Mothers who take care of children are often the first to detect abnormalities of children and provide valuable evidence to doctors for early diagnosis and treatment of children. Therefore, in order to take care of children well and fully, parents need to be able to read and understand common food and medicine labels, health education materials. However there is a lack of studies about health literacy among mothers who have under 3-year-old children.

Objectives: This study was conducted to examine the health literacy classes of mother has children under 3-year and to evaluate how these classes were related to demographic characteristics.

Methods: Participants were the mothers having under 3-year-old children and visited vaccination clinics at Hanoi Medical University ($n=389$). Participants were interviewed to complete the Health Literacy Questionnaire (HLS-EU-Q47) which was modified to suitable with participants in this research. The latent analysis was conducted

to identify classes of health literacy within the sample. Chi-square analysis and a one-way Analysis of Variance (ANOVA) was used to measure differences between identified classes on demographic and social life characteristics of mothers, and their children demographic. Results: Three health literacy classes were identified. The low, moderate and high health literacy score group accounted for 9%, 62.5% and 28.5% of participants, respectively. When comparing between 3 classes, there were differences in ethnic, having family members with chronic illness, the level of Internet access to look up information of mothers and ages of children.

Conclusion: The current study found that low to moderate health literacy levels were common for mothers who have under 3-year-old children. There were differences in characteristics of participants between three classes. Future research should examine strategies to improve health literacy for lower score class.

Keyword: HLS-EU-Q47, mothers, under 3-year-old children, health literacy.

P17.

Association of health literacy of mothers with their decision on screening for autism spectrum disorder (ASD) in children aged under 3 years old in Vietnam

Pham Hai Thanh 2, Trinh Thi Mai Le 2, Luu Ngoc Minh 1, Nguyen Thi Huong Thao 2, Do Thi Thanh Toan 1, Dinh Thai Son 1, Luu Ngoc Hoat 1, Nguyen Thi Thu Huong 1, Pham Thi Hong Hanh 2, Duong Thi Trang 2, Tran Thi Thuy Linh 2, Nguyen Thi Thu Hoai 2, Le Thi Hoai

1. Department of Bio-statistics and Medical Informatics, Hanoi Medical University

2. Hanoi Medical University students

3. Hanoi University of Public Health

Background: Autism spectrum disorder (ASD) can be screened early, particular, children under 3 years old. Screening provides a standardized process to ensure that children are systematically monitored for early signs of ASD to promote earlier diagnosis.

Objective: This study was conducted in order to describe decision's mothers on screening for autism spectrum disorder in children under 3 years old, and to examine how characteristics, health literacy of mothers and demographic of children are associated with the decision on screening for ASD in children.

Method: This study was a cross-sectional study. Survey was conducted with 389 mothers with children aged under 3. The independence variables including mothers' demographic, characteristics of children were collected by a questionnaire, and health literacy of mothers was collected by HLS-EU-Q47 questionnaire (Cronbach's Alpha total questionnaire was 0.947). The dependent variable was decision on screening for ASD in children. The logistic regression model was used to identify factors affected with mothers' decision on ASD screening. Bayesian model averaging (BMA) was used for model selection.

Results: There was 44.47% of mothers decided to screen for ASD in their children. Age of children, monthly examination and some variables of health literacy had been selected into logistic model by BMA. Logistic model showed that all of these factors were associated with making decisions on taking ASD screening among mothers. All these statistics were significant (p -value < 0.05).

Conclusion: The study's findings demonstrated that almost half of mothers accepted their children screening for ASD. It also showed

that several characteristics of children and health literacy of mothers were associated with mothers' decision on screening for ASD in children.

Keywords: Health literacy, autism spectrum disorder, decision on screening, mothers, Vietnam

P18.

Proportion and factors associated with hyperuricemia of people over 40 years old in Quang Nam Province

Duong Quoc Thao 1, Tran Xuan Minh Tr i2, Doan Phuoc Thuoc 2

1. Quang Nam Centers for Disease Control and Prevention

2. Faculty of Public Health, Hue University of Medicine and Pharmacy

Background: Hyperuricemia is one of the metabolic disorders, which is closely related to a variety of chronic non-communicable diseases such as heart attack, stroke, diabetes, gout, etc. Studies of hyperuricemia over the past century shows that blood uric acid levels have increased rapidly.

Objectives: 1. Determining the rate of hyperuricemia of people over 40 years old treated at Internal Medicine Clinic, Quang Nam General Hospital in 2018; 2. Analysis of several factors related to hyperuricemia of the study subjects

Method: This study was designed based on the cross-sectional descriptive model of a representative sample of 306 adults aged over 40 years old treated at the internal medicine clinic, Quang Nam General Hospital in 2018

Results: The rate of hyperuricemia in both sexes is 42.2%, 50.7% in men and 20% in women. The average index of blood uric acid is 388.67 ± 112.01 $\mu\text{mol/l}$. The rate of hyperuricemia increases with age groups, the highest is in the age group of 50- <60, accounting for 44%. The rate of hyperuricemia in the group with BMI ≥ 25 is 58.2%. In the group of people who use alcohol and smoke, the rate of hyperuricemia is 57.4% and 48,5% respectively. There was a correlation ($p < 0.05$) between gender, BMI, physical activity and drinking habits with the rate of hyperuricemia of the study subjects.

Conclusions: The rate of hyperuricemia in both sexes is 42.2%. There was a correlation ($p < 0.05$) between gender, BMI, physical activity and drinking habits with the rate of hyperuricemia of the study subjects. Participants in the study with hyperuricemia should be raised their health literacy by receiving knowledge of hyperuricemia and nutritional counseling to change their diet and exercise, especially the male group, the group with overweight and obesity and the group with the frequency of using red meat.

Keywords: hyperuricemia, blood acid uric, health literacy

P19.

Identify quality assessment tools for medication literacy measures

Okti Ratna Mafruhah 1,2, Hsiang Wen-Lin 1.

1. School of Pharmacy, China Medical University (CMU), Taiwan

2. Pharmacy Department, Islamic University of Indonesia (UII), Indonesia

Background: Health literacy (HL) plays an important role to improve health outcome of patients. One of functional health literacy (FHL) is Medication literacy (ML). During 2000-2018, many tools were developed to measure HL and ML status. Mostly, the definitions and dimensions of these tools adapted from HL, and different authors

have different ideas to develop diverse fields for ML. In 2017, the International Pharmaceutical Federation (FIP) announced an international version of ML definition. Since this definition published, developing tools for measuring ML has specific direction. Due to this, the evaluation for ML tools is needed, and to find out whether these tools meet with FIP statements or not. On the other hand, to identify good measurement tools is still challenging, and need an assessment to evaluate the quality of these tools. Different authors of systematic reviews (SRs) of HL have different preferences to assess or evaluate the study criteria in this field.

Objectives: This is a literature review that has objectives to know what the suitable tools for assess quality of ML instruments from previous HL systematic reviews.

Method: This study started from looking for suitable SRs in HL related medication or disease treatments from Pubmed, Scopus, and EMBASE, start from 2000 to 2018. Then we look for quality study assessment in each of SRs. We did comparison among these. We picked some papers from in each SRs which follow specific guideline. We evaluated these article based on the FIP statement for medication literacy items.

Results: We found 15 SRs and 1 scoping review that match or close with ML topic. One full paper SR could not retrieve, so finally we have 14 SRs. From five SRs, we collected four assessing risks of bias for evaluate quality of development tools study, i.e. COCHRANE, COSMIN, SURGE, and the AHRQ's Evidence-based Practice Center Systematic Review Manual (AHRQ's EPC SRM). Others reported in description approach about psychometric characteristics. In general, COCHRANE provide tools for assessing Randomized Control Study (RCT). COSMIN created detail checklist for development tools but specific use for assessing Patient Reported Outcome (PROM) studies. SURGE is a quality assessment of reporting guideline for survey research. Limitation of this study was their sample limited on self-administered survey. The AHRQ's EPC SRM graded quality of articles based on 9 domains in developing tools, and its applied to criticize observational and RCT study. Furthermore, we randomly selected tools from 5 SRs, i.e. SAHLSA, PHLAT, DNT, NVS, HeLMS, HLSI, REALM-R, REALM, BRIEF. We identify and calculate percentage items/questions medication related are 0-47% from total and 0-23% with FIP statements.

Conclusion: An assessment tool in ML is important. SURGE and AHRQ's EPC SRM approach may consider as assessment tools for review quality of research in ML. But so far, there are no specific evaluation tools to accommodate FIP statements. Although DNT is one of the highest percentage in this study, but still some of dimension for ML could not identified. We recommend to have consensus to evaluate quality study for ML content.

Keywords: medication literacy, assessment tool, review, measurement

P20.

Health literacy in secondary prevention of cardiovascular diseases

Daniyar Ainakulov 1, Altyn Aringazina 2.

1. PhD student, "Kazakhstan School of Public Health" Kazakhstan Medical University

2. "Kazakhstan School of Public Health" Kazakhstan Medical University

Background: Cardiovascular diseases (CVD) are the leading cause of illness and fatality in Kazakhstan. The incidence rate of CVD in 2018 amounted to 2413 per 100 thousand people. According to data from

the Statistics Committee 2018, mortality from CVD was 174.8 per 100 thousand people. Control by decreasing cardiovascular risk factors can prevent most CVD. After diagnosis, attention to self-care behaviours is critical for decreasing clinical adverse outcomes in these patients, but insufficient health literacy is a potential barrier for the acquisition of knowledge and skill. Health literacy is the ability to understand and act on health information and is linked to health outcomes. While many instruments have been developed, validated, and used to assess health literacy skills, their use and appropriateness among patients with CVDs are not widely studied.

Objective: To determine the role of the health literacy in secondary prevention of CVD among patients.

Methods: A review of the used literature was completed using PubMed and Medline databases. The selected search terms for the database search were 'health literacy', 'cardiovascular disease', 'secondary prevention', 'measurement of health literacy'. All relevant articles were reviewed manually, dated from 2006 to 2019 with a method to estimate health literacy concerning CVD management.

Conclusion: Results of the survey show that compliance with the secondary preventive management can decrease mortality and morbidity significantly furthermore can increase the clinical stability, prognosis and quality of life in adults with CVD. However, high-risk cardiovascular patients are often unlikely to attend the preventive program. Statistical data tells that about 70 to 85% of patients with CVD would not keep to their secondary preventive treatments. As a result, these CVD patients experience 1.5 to 3 times more harmful health complications compared to those with high health literacy, leading to higher medical costs. More CVD-specific health literacy screening instruments are warranted. Assessment of health literacy should be a standard of care in patients with CVDs, and effective interventions should be developed to improve the impact of limited health literacy on health outcomes in this population.

Keywords: Health literacy, cardiovascular disease, secondary prevention

P21.

Positioning Our Purpose: Communicating Health Through 'NutriSkwela' Community Radio in Ifugao, Philippines

Ryan C. Guinaran, Paul Joseph A. Nuval

Benguet State University, La Trinidad, Benguet 2601, Philippines

Background: Effective health communication and health literacy are central to the attainment of healthy communities especially in the underserved areas. Government-supported community radios assist in shaping health behaviors in rural communities as these are area-based relevant platforms to communicate, educate, and encourage active health engagement to improve health outcomes.

Objectives: The study aimed to analyze the health communication and literacy influences of the National Nutrition Council's (NNC) 99.1 Radyo Kiphodan, a NutriSkwela (Nutrition-School) Community Radio in Ifugao province, Philippines.

Method: Guided by the cybernetics tradition of communication (Craig, 1999), the study utilized technology assessment, media analysis, and most significant change technique. Participatory communication tools such as ocular survey, trend analysis, interviews, and participatory observation were employed. In assessing the performance of the Radyo NutriSkwela operations that aims to improve people's access to information and nutrition-related

concerns, the study used the National Nutrition Council's Monitoring Tool.

Results: Results showed that the health programs being aired in the Radyo Kiphodan are composed of six radio formats covering multisectoral development programs of the local government unit. Further, the community radio conforms with the participatory communication approach in the development of community radio programs (Tabing & Osalla, 2001) and the P-Process in the development of health communication campaign (MADW-CWHE, n.d.). Three outputs are seen: 1.) Sustained Radyo Nutriskwela operations that improve people's access to information and nutrition-related concerns (through radio); 2.) Increased flow of accurate and construable information to and within the community through information formulation and culturally appropriate dissemination; and 3.) Increased participatory community development (participatory management). The community radio was seen as a vital component of the LGU's multi-strategy nutrition program that improved nutritional status especially among the children. Underweight preschool children was at 4.7% when the Radyo Nutriskwela was established in 2008. In 2017, this rate was decreased to 2.07%.

Community radio management is multisectoral. It has broad involvement of many government and community stakeholders in management and in programming. The production process is centralized though and used top-down approach. The community radio has not been fully observing the 60%-40% allotment for health/development programs and entertainment. More airtime for entertainment happens on some days.

Conclusion: Development benefits for the community are derived from the operation of the community radio. Access to information especially on local matters is made real-time. The presence of the community radio has allowed dissemination of relevant information on almost every government agency and community concern and not just on health and nutrition. A review of the operations and support to content development and human resources capacitation toward localization and contextualization of health information will be vital in responsive and sustained community radios.

Keywords: health literacy, health communication, community radio, participatory communication

P22.

Integrating behavioral activation technique in cognitive-behavioral therapy treatment for anxiety disorders in Viet Nam

Nguyen Thi Bich Tuyen, Nguyen Thanh Truc

Clinical Psychology Department, National Psychiatric Hospital No2

Background: Behavioral activation technique is almost exclusively used in the context of depression treatment. Consistent surveys show that about 50% of people with depression have an associated anxiety (Mineka, Watson & Clark, 1998), poses an urgent research problem to better understand the appropriateness of applying behavioral activation treatment for anxiety-related behaviors. The structural and functional similarity overlap between anxiety and mood disorders suggests that the concept of behavioral activation technique is also compatible with the treatment of anxiety disorders (Hopko, D. R., Robertson, S. M. C., & Lejuez, C. W., 2006).

Objectives: The main aim of this article was to determine the rationale for integrating behavioral activation techniques with cognitive-behavioral therapy for the treatment of anxiety disorders in Vietnam, and illustrate the implementation and effectiveness of these strategies using a clinical case example.

Method: This case study described a 3-month course of treatment for an outpatient diagnosed with Generalized Anxiety Disorder. The Zung Self-Rating Anxiety Scale (SAS) was used to measure the levels of anxiety in this patient before and after treatment.

Results: The Zung score was decreased over the three evaluation periods (T1=48, T2=45, T3=37). Cognitive restructuring worksheets and behavioral activation hierarchy were included to record positive changes in cognitive and behavioral problems of the patient after treatment.

Conclusion: This case study shows how behavioral activation techniques can be integrated into cognitive-behavioral therapy treatment and can contribute to the improvement of treatment for anxiety disorders theoretically and practically. More extensive research is needed to assess the effectiveness of applying the treatment to various types of anxiety disorders. This helps patients with anxiety disorders take advantage of behavioral activation strategies more effective to cope with future anxiety risks (that is mental health literacy for anxiety disorders).

Keywords: behavioral activation strategies, cognitive-behavioral therapy, anxiety disorder treatment, case study, mental health literacy

P23.

Implications of Indeterminacy between Requests (for action) and References (of information) for Public Health Communication and Critical Health Literacy

Anthony T. NG

Department of English, The Hong Kong Polytechnic University, Hong Kong

Background: Requests for action are significant for ensuring clear communication, facilitating interventions of health literacy and the delivery of quality health care services throughout our life-long health journey, while accountable for causing indeterminacy between requests (for action) and references (of information) if presented unclearly or implicitly, leading to socio-communicative risks and failures in health care (Matthiessen, 2013). Also, such indeterminacy compromises the essence of Critical Health Literacy (CHL) in helping citizens enhance their health literacy and confidence to act upon it, in addition to promoting greater independence and empowerment collectively in society (Nutbeam, 2000; Rubinelli, et al., 2009; Chinn, 2011; Sorensen et al., 2012; Náfrádi et al., 2017; Sykes & Wills, 2018). While CHL has mostly been discussed at the individual level, this was the first study of this concept in Hong Kong with focus on cross-institutional health communication.

Objectives: This study examined requests for action in automated health communication from Hong Kong Government to local educational institutions in 2017 to (1) better understand the language of requests, (2) reduce or avoid indeterminacy, and (3) facilitate the building of CHL.

Method: 1,206 instances of processes (requests and references) were quantitatively and qualitatively examined by (a) drawing resources of Systemic Functional Linguistics (Halliday & Matthiessen, 2014) and

Critical Consciousness of structural inequalities (Freire, 1973), a core value in many discussions of CHL, and (b) taking a complementary ideational approach (construing each process as a quantum of change in our experience) rather than the traditional interpersonal approach (enacting healthcare provider-patient relationships during the patient journey) to analyzing health communication as a “semiotic system of social context” involving instances of exchange of social meanings in relation to institutional roles, accountabilities and counterparty risks (Halliday, 1978, 1984a & 1984b).

Results: 6% of the instances displayed indeterminate tendency. However, the systemic conceptualization (or registerial profiling) of requests (i.e. Action Orientation) and a system of ORIENTATION (request vs. reference) contribute to reducing indeterminacy and facilitating CHL.

Conclusion: Given their significance in health communication and implications for CHL, requests for action should be given more attention, especially those containing indeterminacy with which any good advice for disease prevention and health protection will be in vain or even hazardous to the addressee.

Keywords: Requests for Action, Indeterminacy, Socio-communicative Risks and Failures, Automated Cross-institutional Communication, Public Health, Critical Health Literacy

P24.

Measuring health literacy among first year college students of Universitas Pattimura

Yoslien Sopamena, Yulita Sirinti Pongtambing, Yessy Fitriani, Wa Ode Arin Sri Andriani, Dien Anshari

Department of Health Education and Behavioral Sciences, Faculty of Public Health, Universitas Indonesia, Depok, Indonesia

Background: Health literacy is defined as people’s competences to access, understand, appraise and apply information to make health decisions in everyday life throughout the life course. Such cognitive and social skills on health have been studied as an important part in shaping health behavior, especially among young adults. However, research around health literacy in Indonesia, especially among young adults in its eastern part of is lacking.

Objectives: This study aimed to measure health literacy and its association with social demographic characteristics among first-year undergraduate students of Universitas Pattimura, Maluku.

Method: Data for this cross-sectional study came from an online survey designed to garner a quota-based sample of 362 first-year college students from Universitas Pattimura. Health literacy was measured using 16 items from the short version of Health Literacy Scale Questionnaire (HLS-EU-Q16) with response options ranging from 1 (very difficult) to 4 (very easy), which had been adapted into Indonesia context and had been used on previous research. Social demographic characteristics include sex (i.e., male vs female), income (measured by low vs high weekly expenses), health insurance coverage (no insurance vs have at least 1), and academic background (measured by academic clusters of health science, technological science, and social and humanity science).

Results: The average score of health literacy among all sample was 2,95 (SD=0,45). The health promotion dimension of health literacy has the highest score (M=2,98; SD=0,63), followed by health care dimension (M=2,96; SD=0,48) and the disease prevention dimension (M=2,85; SD=0,58). Of its three domains, the functional domain has

the highest score (M=3,22; SD=0,46), followed by the interactive domain (M=2,87; SD=0,57) and the critical domain (M=2,69; SD=0,57). Female students have slightly higher health literacy (M=2,95; SD=0,44) than their male counterparts (M=2,88; SD=0,48), but the difference is not significant. Similarly, students with high weekly expense have higher health literacy (M=3,04; SD=0,49) than those with low weekly expense (M=2,92; SD=0,45), but the difference is not significant. Among students from the three academic clusters, there were no significant difference of health literacy. Nevertheless, students with health insurance coverage have significantly higher health literacy than those without health insurance (M=2,95 vs M=2,86; t=2,14, p<0,05).

Conclusion: Health literacy among Universitas Pattimura is rather good, but there is still room for improvement, especially for the interactive and critical domains. Thus, intervention to improve health literacy among first year college students in Universitas Pattimura is recommended regardless of their sex, income, health insurance coverage and academic clusters.

Keywords: health literacy, social demography, college student.

P25.

Using Cognitive Interviews to Adapt Health Literacy Scale Instrument for First Year College Students of Four Public Universities in Indonesia

Yulita Sirinti Pongtambing, Yoslien Sopamena, Yessy Fitriani, Wa Ode Arin Sri Andriani, Dien Anshari

Department of Health Education and Behavioral Sciences, Faculty of Public

Health, Universitas Indonesia, Depok, Indonesia

Background: Research on health literacy, defined as individual’s ability to obtain, process, and understand basic health information and services needed to make appropriate health decision, is lacking in Indonesia, particularly due to its limited assessment tool. As the largest archipelago with over 17,000 islands lived by more than 600 ethnic groups and local languages, adapting one instrument suitable for such diverse groups is necessary. This study adapted the short version of Health Literacy Scale Questionnaire (HLS-EU-Q16) for use in population of educated young adults.

Objectives: This study aimed to adapt the short version of European Health Literacy Scale (HLS-EU-Q16) for assessment among college student in four public universities in different regions of Indonesia.

Method: We conveniently recruited first-year college students from four public universities in different provinces (i.e., Universitas Andalas in West Sumatera, Universitas Hasanuddin in South Sulawesi, Universitas Halu Oleo in South East Sulawesi, and Universitas Pattimura in Maluku) to participate in this qualitative study. Cognitive interview technique was used to pilot testing the 16 items in HLS-EU-Q16 that had been translated into Bahasa Indonesia. Participants in each of the four universities were interviewed by trained researchers asking for their comprehension of the questions and response options using the verbal probing technique.

Results: Forty students from four different universities (10 participants in each university) attended the interview sessions of HLS-EU-Q16. Questions about ‘appraising some information’ from health workers and ‘seeking for a second opinion’ are frequently reported to be incomprehensible. Difficulties are attributed to vocabulary (e.g., ‘second opinion’ is rather incomprehensible, nor it is

a common practice among Indonesians), and sentences structure (e.g., long sentences).

Conclusion: HLS-EU-Q16 is a suitable instrument to assess health literacy with minor adjustment in the vocabulary and sentences structure. A survey is needed to pilot testing the adapted instrument with bigger samples to test its reliability and construct validity.

Keywords: health promotion, youth, healthcare

P26.

Evaluating the effectiveness of the Mental Health First Aid training among Chinese-speaking tertiary international students in Melbourne

Xiao Yu Zhuang 1, Daniel Fu Keung Wong 1, Ting Kin Ng 2

1. Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong

2. Department of Applied Psychology, Lingnan University

Background: Chinese-speaking international students have become the largest group of international students in Australia, accounting for 30% of the 693,750 international students who resided in Australia in 2018. Chinese-speaking international students have been widely reported to have a low level of mental health literacy. Mental health literacy refers to the possession of 'knowledge and beliefs about mental disorders which aid their recognition, management or prevention,' and is an important factor that impacts on help-seeking behaviours among people with mental illness. Therefore, Chinese international students usually have difficulty in recognizing their psychological problems and delay treatment until their symptoms become rather disabling. Leaving a mental health condition untreated may result in adverse long-term outcomes such as bad academic performance, unemployment, poverty, health and mental health problems, self-harm behaviours, and suicidal attempts. Thus, it is necessary to find ways of encouraging Chinese international students to seek help from mental health services at the earliest time possible. Objectives: Mental Health First Aid (MHFA) training is a standardized educational programme developed to combat mental health problems in the general public by increasing mental health-related knowledge, improving attitudes and stimulating helping behaviours. Therefore, the present study pioneered to evaluate the effectiveness of MHFA training in improving mental health literacy among Chinese-speaking international tertiary students.

Method: A quasi-experimental design was adopted whereby 202 Chinese-speaking international students in Melbourne were recruited to the MHFA condition or the control condition. Participants in the MHFA group underwent a 12-hour MHFA training programme over two consecutive weeks and participants in the control group did not receive any training. All participants completed a standardized questionnaire before, at the end and three months after training. Data were analysed using multilevel modelling.

Results: The findings demonstrated that MHFA training might be effective in improving participants' mental health literacy (i.e., recognition of symptoms, belief in helpful treatments and understanding the biogenetic and psychosocial causes) and reducing stigma.

Conclusion: The MHFA programme has the potential to enhance mental health knowledge and promote help-seeking among Chinese-speaking international students.

Keyword: Mental Health First Aid, Mental health literacy, depression and schizophrenia, Australia, Chinese-speaking international students

P27.

Tuberculosis literacy and completion of household contact investigations: A household-based survey from Southern Thailand

Myo Minn Oo, Edward B McNeil, Nattaporn Tassanakijpanich, Moe Hnin Phyu, Nanda Safira, Shashi Kandel, Kemmapon Chumchuen, Limei Zhang, Hnin Aye Kyu, Porphorn Sriwannawit, Bintinee Bilmumad, Li Cao, Yingwu Guo, Jarawee Sukmanee, Vu Manh Cuong, Virasakdi C

Epidemiology Unit under the Faculty of Medicine, Prince of Songkla University, Thailand

Background: Systematic household contact investigation for tuberculosis (TB) is one of active case-finding strategies to identify individuals at high risk of contracting TB infection. Although TB control programmes across the world have adopted household contact investigation, infrequent or inconsistent investigation remains a serious challenge. Moreover, reluctance to have or complete the investigations from individual households may pose as an additional challenge and could stem from low TB literacy.

Objectives: This study investigated whether health literacy related to TB (knowledge and attitude) was associated with completion of household contact investigations.

Methods: A household-based survey was conducted during February 2019 in Mueang district of Phatthalung Province, Thailand where 95 index tuberculosis patients were newly diagnosed with pulmonary or pleural TB between October 2017 and September 2018 in Phatthalung hospital. Their household contacts were interviewed using a structured questionnaire. Health literacy related to TB was assessed by six questions: Is TB (1) infectious, (2) curable, (3) preventable? (4) Do you feel ashamed of living with an index TB case? (5) Does living in the house with an index case negatively affect your personal, or (6) social life? Completion of TB screening among household contacts was regarded as households having all contacts screened for TB. Logistic regression modelling was used to assess the associations between TB literacy and completion of screening investigations, adjusted by other co-variables and presented as adjusted odds ratios (AOR) and 95% confidence intervals (CI).

Results: Of 61 responding households (64%), the completion rate was 62.3%. Mean (standard deviation) household scores of knowledge and negative attitude towards TB were 2.7 (0.6) and 0.9 (1.0) out of 3.0, respectively. Households in which all members were screened had a higher knowledge of TB compared to households that were not completely screened (2.9 vs 2.5, AOR = 4.7, 95% CI: 1.3-30.6). The scores of negative attitude in screened versus non-screened households slightly differed but not significantly (0.9 vs 1.0, AOR = 0.9, 95% CI: 0.5-1.6). However, both associations were found to be non-significant in multivariate analysis after accounting for the fact that households were more likely to have all members screened for TB if they were advised to be screened by a healthcare professional (AOR: 8.8, 95% CI: 1.5-84.1) rather than someone else.

Conclusions: Despite high TB literacy, our study found a low rate of completing household contact investigations. TB literacy also does not seem to affect the completion. Further research to help find better strategies to improve completion of TB investigations among household contacts is needed.

Keywords: Household contact investigation, coverage, Tuberculosis screening, health literacy, Thailand

P28.**Communicating Health Risks of Influenza Vaccine to the Elderly**

Vallerut Pobkeeree, Somboon Thaweelap

Faculty of Public Health, Mahidol University, Bangkok, Thailand

Background: Influenza vaccine can decrease mortality in the general population but especially among older people.

Objectives: To examine how the elderly in the central part of Thailand received appropriate information about the influenza vaccine according to health literacy notion.

Methods: A questionnaire was sent out to the population asking how they acquired information about the vaccine from the following nine methods of communication used by the community health office: TV & radio, internet, magazine & newspaper, brochure, poster, family members, neighbors, village health volunteer, and medical or public health personnel.

Results: Two thirds of old people had received information about the vaccine, mostly from village health volunteers. There were statistical differences between the various methods of communication (p -value < 0.001, $df = 8$).

Conclusion: Village health volunteers (VHVs) work closely with health professionals in community health centers in Thailand. One VHV usually handles at least 30 households in a village. They are regularly trained on important health issues or tasks and are selected and trusted by people in their village. VHVs also provide health education and information on the prevention of diseases to people, including the elderly, in their assigned village. As a result villagers can understand and receive accurate health information on the vaccine they require and then make an informed decision on whether to get vaccinated. Perhaps this is the reason why old people trust this source of information with reference to getting immunized by the influenza vaccine.

Keywords: Influenza vaccine, communication, elderly

P29.**Health status and the need to use the health services of the elderly at some elderly Hai Phong clubs in 2018.**

Ha TTT

Faculty of Public Health, The Haiphong University of Medicine and Pharmacy, Vietnam

Background: Population aging was known as a key factor contributing to the elevation of medical expenditure because per capita medical expense in the elderly was higher than that in other age groups. The number of elderly increased fast lead to increase the prevalence of chronic diseases that are common in the elderly such as coronary artery disease, hypertension, stroke, diabetes, cancer, asthma, osteoarthritis, and so on. These diseases need to treat for life. Hai Phong city currently has about 2,044 million people, the number of elderly approximated 16,8% of the population is a significant challenge to the healthcare system. The health system of Hai Phong city should be prepared for the rising trend: get to know more about the need to use the health services of the elderly and developing health services for the elderly to enhance the competence of the system.

Objectives: To describe the health status and the need to use health services among the elderly at some Hai Phong clubs in 2018.

Method: This is a cross-sectional study, was conducted from May to December 2018. The data collected by interviewing the elderly who activity in some health clubs in Haiphong. The tool for measuring the status of disease and the need to use health services based on questionnaires that developed from the WHO's ("personal interview questionnaire about the health situation"). The health status of the elderly was determined by self-assessment of the current health of the elderly and the number of diagnosed chronic diseases (blood pressure, diabetes, cancer, neurology, cardiovascular ...). The need for health care for the elderly is determined by the need for periodic health checks; need caregivers and home health care needs. After the data was collected, it was entered into a computer and analyzed by using SPSS version 19.0 statistical software.

Results: The result showed that 88,5% of the subjects affected by at least one chronic disease. To go into details, the result showed that 35.2% of elderly from a chronic disease, 53.3% of elderly people affected by more than 2 chronic diseases; In which the prevalence of hypertension was 58.6%, musculoskeletal disease (41.4%), cardiovascular disease accounted for 22.4%; cancer (2.4%) and 1.4% suffered from other chronic diseases. The results also showed that 93% of the elderly treating chronic disease; 94.8% have a desire to have periodic health checks; 15.7% currently need caregivers and 41% in need of home health care.

Conclusion: The findings of this study concluded that the prevalence of chronic disease and the demand for health services among the elderly was very high in Hai Phong city. This is time to develop health services for the elderly to enhance the competence of the health care system of the city.

Keywords: demand, health, elderly, Hai Phong

P30.**Health literacy and some factors related to the breakfast practice of third year Medical students in Hanoi 2018-2019**

Hoang Yen Nhi, Nguyen Thi Hang Nga, Nguyen Thi Thuy Linh, Le Thi Giang, Le Duc Dung, Le Xuan Hung

Ha Noi Medical University

Background: Widely recognised as the most important meal of the day, breakfast has direct impact on the general health as well as the academic performance of students and other activities. However, there is only a limited amount of research referring to the breakfast practices of the youths - particularly the medical students who are fully exposed to health-care issues in their curriculums

Objectives: To describe knowledge, attitudes, practices and to analyze a range of factors relating to the breakfast practices of third-year HMU students from 2018 to 2019

Method: Cross-sectional study on 343 third-year HMU students from December 2018 to January 2019

Results: 66.5% of total sample has low knowledge on breakfast, 54.3% has negative attitude and 63.6% does not has good practice on having breakfast. Besides, there is a statistically difference ($p < 0.05$) in the sum of practice points as well as the following factors: knowledge, attitude, reason to(not to) have breakfast, people to have breakfast with, waking up time, academic major, accomodation, spending on breakfast, public information from communicational channels or friends.

Conclusion: The prevalence of the surveyed junior students of Hanoi Medical University, who had high point in knowledge, attitude and

practice of having breakfast, was low, only accounted for one third to a half of the total sample.

Keywords: knowledge -attitude -practice, breakfast, health literacy, university student.

P31.

Development and Pilot-testing of a Schizophrenia Literacy Questionnaire for Caregivers of Patients with Schizophrenia at the National Center for Mental Health

Jerico H. Bajador

National Center for Mental Health/University of the Philippines-Manila

Background: Schizophrenia Literacy (SL), a specific form of health literacy, is the “knowledge and beliefs about schizophrenia which aid their recognition, management or prevention.” Though mental health literacy was vastly studied in foreign countries, there is dearth of research on schizophrenia literacy of caregivers. Thus, development and pilot testing of a SL tool is of paramount importance to researchers, health promotion officers, and public health workers.

Objectives: This study constructed and pilot-tested a literacy questionnaire for caregivers of patients with schizophrenia in a tertiary psychiatric hospital in the Philippines from May-June 2019 primarily to evaluate the adequacy, completeness and appropriateness of this data collection tool.

Method: The National Center for Mental Health Schizophrenia Literacy-B Questionnaire(NCMHSL-BQ) was developed based on studies from seven countries and Southern California, composed of 48 items on different constructs and answerable by Yes, No, or I don't know. It was pilot-tested to 30 caregivers through 'cognitive interviewing' using 'concurrent think-aloud' technique. Items were amended or removed based on a decision guide, like amendment if not clear/ambiguous and removal if too sensitive/not relevant. Analysis on caregivers' information are mainly descriptive. Ethics approval was granted by University of the Philippines-Manila Research Ethics Board and National Center for Mental Health Research Ethics Committee.

Results: Mean age of the caregivers is 41.1(±12.3) years old, 2/3 are females, majority are married and almost all resides in highly urbanized cities. A third are parents of the patient (father/mother). 23% and 13% are High School and College graduate, respectively. On average, pilot-testing took 19.7(±4.2) minutes. Out of 48 items, more than half were amended, 16 were removed, 7 were retained, and 20 items were added- resulting to the final 52-item questionnaire.

Conclusion: Through pilot testing, problem areas and deficiencies of NCMHSL-BQ were identified and addressed prior to implementation of the full prospective cohort study - examining the relationship between caregiver SL and frequency of readmission of their patients with Schizophrenia.

Keywords: health literacy, schizophrenia literacy, pilot testing, cognitive interviewing

P32.

Patient Literacy in Cardiovascular Diseases Prevention to maintain lifestyle changes

S. Dulamsuren , D. Jargalsaikhan, G.Tsetsegdary , E. Enkhtuul, Ts. Munkhdelger.

New Public Health Association, Ulaanbaatar, Mongolia

Background: The cardiovascular diseases (CVDs) are required healthy lifestyle, community based, patient centered, and long-term, sustainable care . In Mongolia, 34.2 percent of the cause of death of the population is indicted cardiovascular disease and 25.5 percent is cancer-causing mortality, which is 59.7 percent of the total population mortality, 2017 .

Objectives: This study investigated whether patient literacy in cardiovascular diseases and confident to maintain lifestyle changes.

Method: In patient CVDs literacy measure information collected from 212 patients using by quantitative research methods. Standard error (SE), confidence interval, and ANOVA model were employed for the statistical analysis on the dataset. Key information including health responsibility, healthy lifestyle, knowledge on medicine, demand health service, beliefs in health prevention, knowledge and practice and ability to make right health decisions were discovered and made synthesis of the findings.

Results: Most patients 209 out of 212 (98%) [88.92-108.25] agreed with “I am the person who is responsible for taking care of my health”. They understood healthy lifestyle is very important to prevent CVDs. Patients 193(91.04%) [82.12-99.96] out of total 212 responders had been practiced every day physical activity and hold healthy food. Patients 146 (68.8%) [62.12-75.62] out of 212 responders were having beliefs in “I can take care of a health problem myself”. Patients 128(60.38%)[54.46-66.29] out of total 212 patients had responded they have knowledge and confident in prescribed medications. Patients 22(10.4%) of total investigated CVDs patients responded as unknown to question do you have demand health care service, and regarding of the CVDs prevention do you believe yours ability to make right decision.

Conclusion: The findings of this study concluded that CVDs literacy had a direct relationship with over 91.04% patients who agreed healthy lifestyle, and confident to prevent diseases is very important to individual health. And knowledge on taking care of prescribed medications confirmed 60.38% to prevent CVDs diseases. 10.4% of total patients with cardiovascular disease were inadequate health service seeking behavior and no ability to make right decision for CVDs prevention that is required literacy in cardiovascular diseases prevention to maintain lifestyle changes.

Keyword: lifestyle, beliefs, makes right decisions

P33.

Health Literacy among Leader of Elderly Social Club at Regional Health Promotion Center 5 Ratchaburi, Thailand

Chatchawan Phetkong , Chachadaporn Jitta

Regional Health Promotion Center 5 Ratchaburi, Department of Health, Ministry of Public Health, Thailand

Background: Thailand has become Aging society since 2000, and aging population will be growing to Aged society in 2020. Health literacy was assigned to important indicator on health behavioral modification, but the information about the status of health literacy in regional public health remain scarce.

Objectives: This study aimed to examine level of health literacy among Thai elders who work as leader in the elderly social clubs.

Method: This was a cross-sectional study. The survey was conducted with health literacy concept and measurement tool of The Health Education Division, Ministry of Public Health Thailand. Participants were 80 elders from 8 elderly social clubs in community, and joined in a pilot project for planning and developing the elderly social club to health literate organization (HLO) at Regional Health Promotion Center 5 Ratchaburi. Data were collected on January 2019 and analyzed by descriptive statistics. Health literacy score were categorized into 3 levels included good, fair, and poor level.

Results: Majority of participants were female 77%, age group was the young-old (60 – 69 years) 47%, finished senior high school 38% and occupations were agriculture 37%. Each of health literacy score showed that: access information was poor level (43.7%), understanding information was fair level 56.2%, communication was poor level (45%), self-management was fair level (42.5%), decision was fair level (50%), and media literacy poor level (38.7%). The overall of health literacy score expressed fair level (65%).

Conclusion: This initial study was indicated to the interventions for improving on health literacy skills among the elderly social club such as access information skill, communication skill and media literacy. The most of leader members should be gained the overall health literacy score at good level because they are key persons who define on operational guidelines for their clubs to achieve the health literate organization.

Keywords: Aging population, Elderly health literacy, Health Literate Organization (HLO)

P34.

Information Needs of Oral Cancer Patients in India: A Qualitative Study Protocol

Bhumika Desai

Tata Memorial Hospital, Mumbai, India and Indian Cancer Society, Mumbai, India

Background: Patients with limited health literacy struggle with medication adherence, distinguishing facts from misconceptions and myths, and communicating effectively with healthcare providers. Knowledge of disease risk-factors, treatment, and outcomes is important for patients with Oral Squamous Cell Carcinoma (OSCC) as they are exposed to complex treatment and follow-up regimes. In India, oral cancer is the third most common type of cancer and affects every 20 per 100,000 population and accounts for about 30% of all the types of cancer. Identifying information needs and assessing information seeking behaviour in these patients is indispensable.

Objectives: This study aims to understand health information needs and cancer information-seeking behaviour of newly diagnosed oral cancer patients.

Method: It will be a qualitative study. OSCC patients above 18 years of age, within one month of new cancer diagnosis and physically and cognitively able, will be considered eligible to participate. Patients will be contacted telephonically and those willing to participate will be provided with study information in detail. Informed Consent will be sought from patients agreeing to participate. Date, time and place for interview will be conveyed. Face-to-face, in-depth interviews will be conducted with approximately 25 patients to reach data saturation. Interviews will take place in Hindi and English languages. Interviews will span about 45 minutes and will be audio-recorded. Interview-

guide will be used to assist the field investigator cover relevant topics: Patient and caretaker information, experience with healthcare provider, prior knowledge about cancer, cancer information-seeking and health information needs.

Data Analysis: Consistent with Grounded theory approach, data collection and analysis will proceed concurrently. Interviews will be transcribed verbatim. Transcripts of interviews conducted in Hindi will be translated to English. Three-stage coding will be performed: (1) initial coding: intense, line-by-line analysis of transcripts (2) focused coding: selected set of most prevalent codes will be identified; and (3) theoretical coding: final categories in resulting theory will be refined. Memo-writing will be used to stimulate and record the developing thinking about collected data. The final outcome of analysis will be a theoretical framework, which will account adequately for all gathered data, while seeking to explain the process of cancer information seeking and information needs and ultimately, patient satisfaction with hospital and/or healthcare provider.

Significance: This study will help us better understand patients' needs for devising patient-centric health education and communication interventions, as achieving health literacy is the end goal to strong patient education. Successful patient education will help them better understand their own health, allowing interaction with healthcare industry in the following ways:

- Finding information and services
- Communicating their needs and preferences and responding to information and services
- Processing the meaning and usefulness of the information and services
- Understanding the choices, consequences and context of the information and services
- Deciding which information and services match their needs and preferences

Keywords: Oral cancer, literacy, patient education, information needs

P35.

Ashes and Sighs: Formulating and Distributing Palliative Care in Cinema

Ian Dixon, Andy Ho

Wee Kim Wee School of Communication & Information
& Lee Kong Chian School of Medicine

Nanyang Technological University, Singapore 637718

Background: Singapore is the fastest aging population globally, but despite 'surging demand for palliative care' there is a dearth of information on the matter (Ho, 2016, p. 1). Singapore's Lien Foundation concurs with WHO's (2019) need for greater capacity-building in meeting the economic/environmental aims of the 2030 Agenda. We define 'health literacy' as the extent to which citizens 'obtain, process, and understand basic health information and services needed to make appropriate health decisions' (U.S. Department of Health and Human Services, 2000). Three key concepts underpin this proposed transformation: Hauntology, Kinaesthetic Filmmaking and Chochinov's 'Dignity Model' for palliative care (Ho & Leung, 2013; Fisher, 2003, p. 3/4). The invisible forces of filmmaking interlock with Chochinov's 'Dignity Model' to render 'end of life' (EoL) as dignified and redemptive (Chan et al., 2012, p. 286). Ashes and Sighs applies Ho/Chan's emergent themes—enduring pain, moral

transcendence, spiritual surrender and transgenerational unity—to the microcosm of film narrative. Research demonstrates ‘user involvement’ to boost morale for patient populations (2013, p. 954; Jarrett, 2007). Co-author Andy Ho provides access to EoL interviewees (patients, caregivers, palliative staff) for our improvisational writing to generate a feature film (2010, p. 119-120) for the sensitive depiction of EoL to inform the prime demographic: caregivers.

Objectives: Following WHO’s (2019) recommendations for improved health literacy, *Ashes and Sighs* aims to enhance Singapore’s palliative care policy by translating key findings into a film asking: How can redemptive cinema convey vital palliative care data to promote health literacy through policy and practice? Improving the community’s access to health information, while supporting their capacity to use this intelligence effectively, is “critical to empowerment”. Our objective is therefore to provide an ethical “critical platform for health literacy messaging” to support people’s entitlement to palliative health (WHO, 2019).

Method: *Ashes and Sighs* is an interdisciplinary study at the cross-section of film theory and medico-psychological principles. Surveys have been conducted in Singapore and Hong Kong to extract data on the current status of palliative care for the benefit of EoL interviewees. Similarly, qualitative analysis regarding the cinematic story’s antagonist/protagonist/life/death binary renders sensorial cinematic experience the most effective vehicle for conveying health literacy to the public. *Ashes and Sighs* innovates methodologies for integrating qualitative and quantitative research uniquely combining therapeutic practice with real palliative care patients and caregivers to: a) support participants; b) invent dramatic rhetoric for popular consumption; c) integrate data analysis into film theory where compassion obstructs the triumph of death and Singapore affirms life by confronting the psychoanalytic notion of Thanatos (Freud, 1990). The film represents direct influence on the people whose lives are directly affected by policy decisions.

Results: While this project has made headway in medico-psychological data collection, the final result will be the accurately distributed screenplay generated through: research & brainstorming; improvisatory material; intellectual questioning, ‘distillation’ & Socratic debate; integration of identified themes. In this way, parallels between medico-psychological theory and screenplay anatomy provide ‘softer insights’ to influence policy applying higher order critical thinking through practice-led research.

We conclude that film can indeed aid and inform this prime demographic through accurate and contemporary medical/psychological research.

Conclusion: Former findings in this study found that more could be done to facilitate health literacy for EoL patients and to arm Singapore with knowledge. While Singapore has made considerable advances in palliative care literacy, our feature film promises to engage caregivers through narrative identification. The role of governments, insists WHO, is to provide leadership and sustained funding for “setting up special projects”. This research forms part of just such a project by making and distributing a feature film to serve as a “critical platform for health literacy messaging” (WHO, 2019).

Keywords: caregivers, EoL, family, hospice, palliative care.

P36.

Validation and reliable of the active aging scale for Vietnamese elderly adults.

Thang Nguyen Huu, Thanh Pham Hai, Lam Nguyen Ha, Khanh Nguyen Ngoc.

Hanoi Medical University, Hanoi, Vietnam.

Background: Maintaining the active ageing can help the older adults reduce their dependence on family and increasing their quality of life. Active Ageing was interested in developed countries but it is new issue in Vietnam. This due to there has been no reliability tool to assess the active aging process in Vietnam.

Objectives: The aim of this study was validated the Vietnamese version of the 36 item Active Ageing Scale-Thai (AAS-Thai 36-items).

Methods: This was a cross sectional study conducted among 503 older adults at Hanoi, Vietnam. WHOQOL-OLD was used to compare the cut-off point of the Vietnamese AAS version. This questionnaire included 36 questions which separated to 7 groups. We conducted confirmatory factor analysis (EFA) to test the validity for all the items and dimensions of the questionnaires. We utilized confirmatory factor analysis (CFA) to ensure the convergent validity of this proposed measurement model. The Structural Equation Model (SEM) used to estimate the model. The aim of Cronbach’s alpha internal consistency coefficient is to examine the reliability of Likert-4 scales. We used the Latent class analysis (LCA) to measure the levels of active aging by the questionnaire. To identify the reliable cut-off point, ROC curve analysis was performed.

Results: The EFA result had found out the Vietnamese version of questionnaire contented 20 items separated to 6 groups. The model indexes of model were: CMIN/DF = 3.163; RMSEA = 0.066; SRMR = 0.059; GFI = 0.909; CFI = 0.909. Cronbach’s Alpha indexes of 6 groups were range from 0.81 to 0.83. We compared with cut-off point of QOL scale of WHOQOL-OLD to found cut-off point of AAS. There were 4 levels of active aging were found by LCA. The ROC curve analysis had point out the optimal cut off point was 61.5. Elderly adults were Active Ageing score ≥ 61.5 who was a good Active Ageing level.

Conclusion: The Vietnamese version of Active Ageing Scale -20 - item separated to 6 groups is a validation and reliability tool to screening and measuring the Vietnamese older adults among ageing period. The questionnaire can use to classify the adults to active aging levels at Vietnamese social.

Keywords: elderly adults, active ageing, validation, Vietnam, classify.

P37.

Health Promoting Hospital: Evidenced from a University Medical Center

Phan Thanh Phuc 1, 2, Chung-Chien Huang 1, Nguyen Hoang Bac 2

1. Taipei Medical University, Taiwan.

2. University Medical Center at Ho Chi Minh City, Viet Nam.

Background: In recent years, Vietnam has been spending a significant proportion of its wealth on health, approximately 5.1% of gross domestic product (GDP) per year. The Ministry of Health has provided several guidelines and policies on health care for the poor, residents of isolated and remote areas, and ethnic minorities in order to reduce disparities in health status. University Medical Center (UMC) at Ho Chi Minh City is an academic hospital in the South of Viet Nam. Its missions are to provide healthcare services, educate medical students, be responsible for community health, and to promote patient-center care.

Objectives: To describe the activities and achievements of UMC in reducing the health disparity and inequity, and in promoting the patient-centered care and health literacy.

Method & Result: UMC has conducted 21 medical tours, 28 weekly patient training courses, 02 cancer screening programs annually. Hospital has also conducted activities for fund raising. In one year, hospital provided free medical examination and treatment to more than 15,000 citizens in rural areas (highlands, central and Mekong Delta provinces). Hospital has provided several educational programs to about 3,000 patients with chronic conditions e.g. diabetes, hypertension, orthopedic diseases. Providing cancer screening programs to nearly 1,000 patients per year. The funding raised approximately from 50,000 USD in the year 2017 to 100,000 USD in the year 2018. Furthermore, hospital has established the social media channels to enhance the patient engagement and broadcast health promoting activities such as: Facebook, Youtube, Website, etc. UMC has received the Ministry of Health Award for the achievement of the program.

Conclusion: UMC has contributed to reduce health disparity, promote patient-center care and improve health literacy. The UMC's activities are highly suggested to other hospitals. Future studies are required to evaluate the effectiveness of programs on people health outcomes.

Keywords: health promoting hospital, patient-center care, health disparity, medical services, medical tours.

P38.

A nationwide study on retail pharmacists knowledge, attitude and perception towards patient safety in Malaysia

Palanisamy Sivanandy 1, Marikannan Maharajan 1, Tan Tyng Wei 2, Tan Wee Loon 2, Lim Chong Yee 2, Dayalini Rajasekar 2, Aruna Ranjan 2, Kalaivani Mathialagan 2, Saranya Kumaran 2, Ho Xin 2

1. Department of Pharmacy Practice, School of Pharmacy, International Medical University, Kuala Lumpur, Malaysia.
2. Students, School of Pharmacy, International Medical University, Kuala Lumpur, Malaysia

Background: The significance of patient safety has grown worldwide and becoming a focus of clinical care as a major global concern. The increased incidence of patient harm due to unsafe services leading to declined health outcomes and even death. Health literacy play a major role in educating the healthcare professionals in order to prevent the number of patient safety issues. **Aim:** This study was aimed to evaluate and relate the retail pharmacist's knowledge, attitude and perception towards patient safety. **Methods:** A cross-sectional, paper-based survey was carried out over 3 years (June' 2015 -December' 2018) by including Malaysian registered pharmacists those working in retail pharmacies across 9 states of Malaysia. Two different set of questionnaires consist of 64 items were used in this study.

Results: 94.65% (n=1027) response rate was obtained from the study participants of 1085; out of which, 604 (58.81%) were senior and 423 (41.19%) were junior pharmacists. The highest positive response rate (PRR) was observed for openness in communication (95%), team work (93.07) and patient counselling (92.54%) domains. Among all the domains, PRR score for "staffing, work pressure and pace" was the least (60.58%). Most of the pharmacist were not aware of documenting different types of mistakes, and only few pharmacists said they will rarely or sometimes document the mistakes. The overall

patient safety grade of the pharmacies was good (408; 39.73%). The knowledge of patient safety was less in pharmacists those working in Sabah and it was high in pharmacists working Kuala Lumpur. The attitude and perception on patient safety among the working pharmacists in Sarawak, Negeri Sembilan and Perak were high, but it was very low in Johor, Selangor and Melaka. Hence, health literacy programmes are need to be implemented in an emergency basis in those area that has low level of patient safety awareness.

Conclusion: The current practice of patient safety at retail pharmacies across Malaysia is fluctuating, and the knowledge of patient safety among pharmacists are high in urban than in rural areas. A comprehensive nation-wide programme is warranted to strengthen patient safety across the nation.

Keywords: Patient safety, communication, knowledge, attitude, perception.

P39.

Exploring the relationship of eHealth Literacy, Perceived Credibility of Health Information Sources and Internet Fake-Checking

Ying-Hsuan Chen 1, Yi-Chen Wu 2

1. Graduate Student, College of Communication, Fu-Jen Catholic University, Taiwan
2. Distinguished Professor, College of Communication, Fu-Jen Catholic University, Taiwan

Background: Fake information on social media is an urgent issue, and even more so in the health field. People rely more and more on eHealth information for daily nutrition and health care guidance, despite the possible lack of accountability, dubious quality and loose confidentiality. In August 2018, the Taiwan Fact Checking Center was developed to curb the negative impact of false information and enhance the online literacy of the public.

Objectives: The study expects a positive relationship between e-health literacy and fake-checking behavior, but a negative relationship between perceived source credibility and online fake-checking.

Method: The online survey was applied for data collection. Those who ever seeking health information from the internet, with the age above 20, were seen as the qualified respondents. The statistic analysis of one-way ANOVA will be adopted to identify significant impacts of the demographics, online health literacy and perceived source credibility on fake-checking behavior.

Results: pending

Conclusion: pending

Keywords: eHealth Literacy, Perceived Credibility of Health Information Sources, caregiving, Internet Fake-Checking

P40.

Integration of Synchronous Distance Learning and Team Based Learning to Provide Community Health Professionals with Health Literacy Training

Mei-Chuan Chang 2, Chuan-Hsiu Tsai 2, Ying-Wei Wang 1, Jyh-Gang Hsieh 2, Mi-Hsiu Wei 2, Chien-Yuan Wu 1, Chun-Hsiang, Chen 2.

1. Health Promotion Administration, Ministry of Health and Welfare, Taiwan.
2. Tzu Chi University of Science and Technology 880, Taiwan.

Background: Health literacy has recently gained widespread attention in the field of health because poor health is considered a consequence of low health literacy. Health literacy was also one of the three objectives presented at the 9th Global Conference on Health Promotion in 2016. Recent surveys have indicated that a majority of healthcare providers, domestic and abroad, lack health literacy training; we believe this will hinder the promotion of health literacy and the future provision of healthcare. Community health professionals are the first-line health workers who enhance the health literacy of the public. Enhancing their knowledge of health literacy and introducing care with health literacy can help prevent inadequate health literacy from impeding patient acceptance of health services.

Objectives: The aim was to integrate the synchronous distance learning, team-based learning, and flipped classroom strategies to provide community health professionals with health literacy training so as to analyze the effectiveness of this approach.

Method: A health literacy course was designed for community health professionals and instructional videos were used for previews before class. The course contents included four units: health literacy concepts, oral and written communication addressing health literacy, community health literacy programs, and health literacy practices involving senior citizens. A 90-minute class covered one unit each week. We combined synchronous online teaching with a flipped classroom and team-based learning. Class activities were designed for each unit to enhance knowledge application. The course was run twice and taken by a total of 63 community health professionals at 10 district public health centers. Learning effectiveness was determined based on participant satisfaction and course feedback.

Results: The participants previewed the course content an average of 1.77 times (3 times in total). In terms of overall satisfaction with the course, 89.4% of the participants were satisfied or very satisfied. Qualitative analysis of the feedback indicated that staged instruction facilitated learning; the course had comprehensive content; distance education enabled a high degree of participation; the flipped classroom was lively and interactive.

Conclusion: Synchronous distance learning present a feasible way of providing community health professionals with health literacy training.

Keywords: synchronous distance learning, team-based learning, flipped classroom, community health professionals, health literacy training

P41.

Student's health literacy level according to university type (preliminary results of the ongoing research in Karaganda, Kazakhstan)

Saule Zhakenova, Gaukhar Kayupova, Olzhas Zhamantayev, Zhanerke Bolatova, Nurberk Yerdessov, Zhuldyz Kuanysh.

Medical university of Karaganda, Karaganda, Kazakhstan

Background: Health literacy is a concept that is considered as an important determinant affecting human's health. Evidence from different researches revealed the relationship between level of health literacy and health outcomes, effectiveness of the healthcare resources consumption, health behavior in adults and children. Low health literacy is associated with low self-reported general health, low self-reported physical health and low self-reported mental health.

Poorer health literacy was associated with some adverse health outcomes, such as obesity and smoking

Objectives: The aim of the present research was to study health literacy of medical and non-medical university students of Karaganda city (Kazakhstan).

Method: A cross sectional survey was conducted between December 2018 and February 2019 among undergraduate students of four universities (Medical university of Karaganda, Karaganda economic university, Karaganda state technical university and Karaganda state university), 18-25 y.o. in Karaganda, Kazakhstan. Stratified sampling method was used to enroll the participants. A short form of the health literacy questionnaire HL-SF12 was used.

Results. Completed surveys were received from 1150 students of whom 56% were female (n = 645). The average age was 20,02±1,78 y.o.. Most of students were single (96.7%; n=1113). The majority of students reported getting their high school education in central Kazakhstan (77.3%; n=889). Mean general health literacy among university students was 31.22 (problematic level): for male HL was 31.2; for female HL was 31.22. There was no significant difference in general health literacy between male and female respondents. There were statistically significant relationships between health literacy level and university type ($\chi^2=38,02$; $p=0,001$), year of study ($\chi^2=54,91$; $p=0,001$), financial status ($\chi^2=43,96$; $p=0,001$), self-assessment of health ($\chi^2=48,7$; $p=0,001$), smoking ($\chi^2=23,75$; $p=0,001$), alcohol consumption ($\chi^2=50,71$; $p=0,001$), frequency of physical activity ($\chi^2=26,25$; $p=0,002$). 38,03% of students of Karaganda State Medical University had excellent health literacy level. There were no statistically significant relationships between respondents' health literacy level and gender ($\chi^2=4,44$; $p=0,217$), age ($\chi^2=22,46$; $p=0,008$) and visiting a doctor during last 12 month ($\chi^2=9,48$; $p=0,148$).

Conclusion. The level of general health literacy among students of Karaganda city is problematic. The findings of this study may be used to develop evidence-based recommendation on improvement of youth-oriented health promotion programs.

Keywords: health literacy, youth, students, university

P42.

Novel approaches to capturing household dimensions of health literacy

Bernadette Bartlam 1, May O'Lwin 2, Wern Ee Tang 3, Peter J. Schulz 4, Lidia Luna-Puerta 1, Aloysius Chow 1, Fang Yan Wong 3, Helen E Smith 1.

1. Family Medicine & Primary Care, Lee Kong Chian School of Medicine, Nanyang Technological University Singapore.
2. College of Humanities, Arts & Social Sciences, Nanyang Technological University Singapore.
3. National Healthcare Group Polyclinics, National Healthcare Group Polyclinic HQ, Clinical Research Unit.
4. Faculty of Communication Sciences, University of Lugano, Italy.

Background: Low health literacy (HL) is associated with poorer health outcomes, increased morbidity and higher mortality rates. It is defined by the World Health Organisation as the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. The concept of HL is extensive and much more than being able to read information and attend appointments, and incorporates functional, communicative/interactive, and critical

domains. It also takes into account environmental, political and social factors that structure inequalities. Consequently, whilst most studies of HL focus on the individual, there are growing calls to broaden its conceptualisation beyond the individual (micro) to the meso (family) and macro (community and society) levels. In Singapore, the family remains the primary unit of support and therefore it is appropriate to look at HL within a household context rather than as an isolated individual skill.

A variety of measures of HL have been validated to capture prevalence and explore associations with patient outcomes. An adapted version of the short version Test of Functional Health Literacy in Adults has been validated previously for use in Singapore: the Health Literacy Test for Singapore (HLTS). Because researching intergenerational HL in the home is both novel and sensitive, to facilitate successful engagement and completion we will involve lay community members throughout the research process.

Aims

1. Test the feasibility of using the HLTS to identify ranges of health literacy within households in Singapore
2. Explore the feasibility of training lay people to work as collaborators within the three main ethnic communities in Singapore (Chinese, Malay and Indian)
3. Develop an intervention to improve household HL in a subsequent large-scale study

Methods: Using a mixed-methods design we will explore the feasibility of assessing HL within individual households in the three main ethnic communities in Singapore. Socio-demographic and health data, together with HLTS scores will be collected. Feasibility will be assessed by recruitment data, ethnographic field notes from lay collaborators and researchers, together with lay focus group debriefing data. Comparisons will be made across the different communities to identify possible cultural dimensions in terms of findings and implications for research methods.

Results: The study commenced in August 2019. Preliminary results will be presented.

Conclusions: The emerging quantitative and qualitative data will be used to develop an intervention designed to improve HL at the household rather than the patient level.

Keywords: Health literacy, culture, inter-generational, patient and public involvement, mixed-methods

P43.

Association between physical activity and depression, anxiety, stress among students at hue university of medicine and pharmacy in 2018

Nguyen Minh Tu 1, Tran Thi Hoa¹, Pham Thi Kim Nhung¹, Tran Thi Thanh Hong¹, Tran Thi My Huyen¹, Nguyen Thanh Gia¹, Tran Binh Thang², Do Ich Thanh³, Tran Anh Quoc⁴, Tran Dinh Trung⁴

1. Hue University of Medicine and Pharmacy, Hue city, Vietnam
2. National Cancer Center Graduate School of Cancer Science and Policy, South Korea
3. Danang Center for Disease Control, Da Nang city, Viet Nam
4. Da Nang University of Medicine Technology, Da Nang city, Viet Nam

Background: Physical activity is good not only for our body but it's great for mental health too. Objectives: The aim of study was to obtain the prevalence of physical activity, depression, anxiety, stress and its

related factors, especially the association between physical activity and depression, anxiety, stress among medical students.

Methods: A cross-sectional study was carried out 770 college students (6 years), majoring in general practitioner from 2nd year to 6th year. Measuring depression, anxiety, and stress have been assessed anonymously using DASS-21, which have been validated for young Vietnamese people.

Results: The prevalence of physical activity was 47.8%, 95%CI (44.3 - 51.3) is not reached with World Health Organization (WHO) recommendations. The prevalence of depression, anxiety and stress were 23.5%, 95%CI (20.5 - 26.4); 35.8%, 95%CI (32.4 - 39.2); 23.8%, 95%CI (20.8 - 26.8), respectively. Result from multivariate model after adjustment for all factors shows that inactivity was significantly associated with an increased prevalence of depression with Odd Ratio was 1.62, 95%CI (1.13 - 2.34), $p < 0.05$; moreover, no significant association was noted in the stress and anxiety ($p > 0.05$).

Conclusion: The prevalence of depression, anxiety and stress among medical students become significantly increasing by year of studying. The finding be suggested that school needs to develop and implement more consultancy service on health problem for students. So, the physical activity should be stated as the important circumstance of school education. However, further studies are needed to confirm casualty of this association and effectiveness.

Key words: physical activity, depression, anxiety, stress, medical students.

P44.

Health literacy and some related factors to the preservation of food in the refrigerator of housewife in Hanoi in 2018

Le Xuan Hung¹, To Thi Phuong Thao¹, Pham Thi Trang¹, Hoang Ha Linh¹, Nguyen Thi Bich Phuong¹, Pham Thi Oanh¹

Hanoi Medical University

Background: The percentage of households using refrigerators for food preservation is very high, according to the press release on the official results of the 2016 Rural, Agricultural and Fishery Census, as of July 1, 2016. On average, 100 households have 65.36 refrigerators and freezers. Many studies around the world have shown that the risk of infection from bacteria and high-risk germs such as *Listeria innocua* (4.4%) was found in the meat and vegetable, 1.7% were detected with *Salmonella* spp, 5.6% of cabinets, Coagulase positive staph (CPS) was 4%. It is one of the causes directly affecting human health every day and the ability to lead to food poisoning, diarrhea, diseases of the gastrointestinal tract are very large. Most studies to date in Vietnam focus mainly on the issue of food poisoning, there are still gaps in research to assess the knowledge, attitudes and practices of people on Store food in the refrigerator

Aims: Describe knowledge, attitude, practice of housewife in Hanoi on how to preserve food in refrigerators in 2018.

Methods: Cross-sectional study conducted 440 housewives from 18-60 years old in Hanoi in 2018

Results: Total knowledge points (TDTH) with quartiles (p25; p50; p75) are (11; 14; 16). Average attitude score (TDTD) is 17.54 (with standard deviation: 4.87 and 95% CI: August 17 - 18.00). Total practice points (TDTH) have a quartile range (7; 10; 11.5). Between knowledge and practice there is a statistically significant relationship ($r = 0.52$). There

is also a significant relationship between attitude and practice ($r = 0.3$).

Conclusion: The total points of knowledge of attitudes, practices and knowledge of cold death use of the guide is not high. The relationship between the three factors is low

Keywords: knowledge-attitude-practice, housewife, refrigerator

P45.

Effectiveness of Pictorial cigarette warning labels on smoking quit intention: Results from Global Adult Tobacco Survey (GATS) 2015

Van Sang Phan 1, Minh Tu Nguyen 2, Binh Thang Tran 3

1. Preventive Medicine Doctor student, Hue University of Medicine and Pharmacy, Viet Nam
2. Office of Academic Affairs, Hue University of Medicine and Pharmacy, Viet Nam
3. National Cancer Center, Graduate School of Cancer Science and Policy, Goyang, Korea

Background: Graphic health warnings (GHW) on tobacco packages are among the most direct and prominent means to increase consumer knowledge of the health risks and, encourage cessation and discourage uptake or relapse.

Aims: To evaluate the impact of graphic health warnings on cigarette packages, particularly in smoking quit intention in vietnam.

Methods: In Viet Nam, GATS was conducted in 2015 as a household survey of persons 15 years of age and older by the Ministry of Health in collaboration with Hanoi Medical University, and General Statistics Office of Viet Nam. A multi-stage stratified cluster sample design was used to produce nationally representative data. Survey information was collected electronically by using handheld devices. A total of 9,514 households were sampled and one individual was randomly selected from each participating household to complete the survey.

Results: In the study, 2700 men and 75 women have smoked and the average age was 43.4 ± 17.08 . Overall, 95.24% of smokers saw or knew of warning images on cigarette packs, of which 61.34% had intention to quit smoking and the rest were not intention or don't know. There is an association between seeing warning images and intentions to quit smoking, those who see the image warn of having a 12 month higher intention to quit smoking than those who do not see (2.95, 95% CI from 1.39 to 6.26, $p = 0.005$). The target group saw a warning image on the cigarette pack affecting the intention to quit with the intention of quitting, intending to quit smoking in the next month who could not see the warning image (32, 4. 95% CI from 19.12 to 55.02, $p < 0.0001$).

Conclusions: Graphic health warnings on tobacco packages strongly affects the smoking quit intention in smoker in Viet Nam, specifically the warning image has reduced 67.6% of smokers.

Keywords: Graphic health warnings, Smoking quit intention, Impact, Adult.

P46.

Knowledge, Attitude, and Practice about Hepatitis B Disease and Demands of Patients Infected with Hepatitis B Virus in the Hue University of Medicine and Pharmacy Hospital

Van Sang Phan 1, Phan Tu Khanh Phuong 2, Hoang Dinh Tuyen 3

1. Preventive Medicine Doctor student, Hue University of Medicine and Pharmacy, Viet Nam

2. Infectious Department, Hue University of Medicine and Pharmacy, Viet Nam

3. Faculty of Public Health, Hue University of Medicine and Pharmacy, Viet Nam

Background: Knowledge, attitude and practice about hepatitis B disease of patients with chronic hepatitis B have an important role in the treatment and prevention of this disease in the community. Identifying demands of the patients help to enhance the quality of examination and treatment of this disease at hospitals.

Aims: To describe the knowledge, attitude, and practice about prevention of hepatitis B virus infection of patients with chronic hepatitis B and to determine demands of the patients in examining and treating this disease in the Hue University of Medicine and Pharmacy hospital in 2017.

Methods: This cross-sectional study was conducted in the Hue University of Medicine and Pharmacy hospital in 2017. A sample () of 191 patients aged between 18-60 infected with hepatitis B virus in the Hue University of Medicine and Pharmacy hospital were non-randomly selected using a convenience sampling technique. were Data were collected via face-to-face interviews . Knowledge, attitude, and practice were measured by using Bloom's Taxonomy (good: $> 80\%$, average: $60\% - 80\%$, poor: $< 60\%$ of total score),.

Results: In total, regarding knowledge about hepatitis B disease, 56% of the patients was poor, 38.7% and 4.8 of them were average and good knowledge, respectively. There was 61.3% and 38.7% of them were in a positive and neutral attitude, respectively. About practice about hepatitis B disease, There was 6.8% of them using condoms regularly. There were 96.9% of patients had personal private devices. In the past 6 months, 99.0% of them had not shared needle-stick with other people. Patients had demand for getting advice from experts on how to prevent the hepatitis B disease from medications for the disease (90,6%), symptoms and prevention of the disease (95,8%), early diagnosis and treatment for the disease (96,3%).

Conclusion: To meet the patients' needs for medical examination, treatment and prevention, it is necessary to improve the counseling skills for medical staff who directly treat patients with hepatitis B.

Keywords: Knowledge, attitudes, practice, patients, hepatitis B.

P47.

Knowledge, attitude, practice on sexuality education of parents have children in teenager in Thuy Van, Huong Thuy, Thua Thien Hue province 2019.

Nguyen Thi Khanh Ly 1, Nguyen Thi Thu Cuc 1, Truong Thi Oanh 1, Nguyen Thi Thanh Thuong 1, Luong Thanh Bao Yen 2.

1. Student of, Hue University of Medicine and Pharmacy
2. Faculty of Public Health, Hue University of Medicine and Pharmacy

Background: In education curriculum of Viet Nam, sexuality education has not been put into consideration adequately. Therefore, parents have a great role besides school and social in supporting correct information for teenager in term of sexuality education. Therefore, we conducted this research with the aims:

1. To determine knowledge, attitude, practice on sexuality education of parents have children in teenager in Thuy Van, Huong Thuy, Thua Thien Hue province.

2. To detect several factors have correlation with knowledge, attitude, practice on sexuality education of parents have children in teenager in Thuy Van, Huong Thuy, Thua Thien Hue province.

Materials and method: A cross-sectional study was conducted on 423 mothers/fathers who have children in teenager's age in Thuy Van, Huong Thuy, Thua Thien Hue province.

Results: The rate of having right knowledge, right attitude, right practice on sexuality education are 31,0%, 86,5%, 43,3% respectively. There are correlation between knowledge and education level of wife/husband of objects; attitude and the discussion between jokefellow; practice and the economic of family, the discussion between jokefellow, local sexuality education, knowledge on sexuality education.

Conclusion: Knowledge and practice on sexuality education are still low.

Keywords: Sexuality education, adolescent.

P48.

The Effectiveness of Stages of Change Model and Social Support Application Program on Adolescent Smoking Cessation, Thailand.

Katawut Suramanka 1, Kesinee Saranrittichai 2

1. Master degree of Public Health, Program in Health Education and Health Promotion, Faculty of Public Health, Khon Kaen University, Thailand

2. Health education and Health Promotion department, Faculty of Public Health, Khon Kaen University, Thailand

This quasi-experimental design study aimed to determine the effectiveness of stages of change model and social support application program on adolescent smoking cessation in Thailand. Study samples were 60 adolescent smokers currently studying in secondary schools. A total of 30 adolescent smokers were randomly allocate into experimental group and control group. The experimental group received the smoking cessation program. The 12-weeks program include educational implementation by using instructional media, set up goal for quit smoking, role model for quit smoking, practice quite smoking by raising awareness, practicing to refuse smoking, and getting support such as observation and giving advice from peers, parents, teachers in school and health care provider. Instrument used in this study were 1) stages of change of adolescent smoking cessation questionnaire , 2) adolescent smoking cessation questionnaire and 3) Fagerstrom Test for Nicotine Dependence. Study outcomes were quit smoking behavior and stage of change of quit smoking behavior. Data were analyzed by using descriptive statistics, independent t-test, paired samples t-test, McNemar Chi-square and Z test for proportion. Results revealed that after the smoking cessation program, in the experimental group had smoking cessation behavioral scores more than the comparison group with statistical significance (Mean difference= 28.63, 95% CI: 26.65 to 30.61 p < 0.001). The experimental group can quit smoking for 13 people (43.3 %) with statistical significance (p-value <0.001)

It is suggested that social support has strong impacts on adolescent smoking cessation. Thus, the application for adolescent quit smoking program is not only including stage of change model but social support from peers parents and teachers need to be focused on.

Keywords: smoking cessation, stages of change model, social support, adolescent.

P49.

Reliability and confirmatory factor analysis of Health Literacy Questionnaire- Asia (HLQ-Asia): a cross sectional survey among Indian adults.

Reetu Passi 1, Manmeet kaur 1, Madhu Gupta 1, Savita Kumari 2

1. Department of Community Medicine and School of Public Health, Post Graduate Institute of Medical Education and Research, Chandigarh, India.

2. Department of Internal Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh, India.

Background: HLQ- Asia is a multi-dimensional tool to measure health literacy of Asian population. We have validated the tool in India before starting a larger intervention study to improve health literacy for managing and controlling hypertension.

Aims: To validate HLQ-Asia in Indian settings.

Methods: A sample size of 260 was used for validation of HLQ-Asia, which is the 50% of sample size (520) calculated for the intervention study. Interview method was used for data collection. Internal consistency (reliability) of the scale was assessed using Cronbach's alpha and confirmatory factor analysis (CFA) was used to measure construct validity using Stata-14.2 version.

Results: Participants' mean age was 36.9 years, 61.5% were women, 31.2% had not completed primary education and 53.1% were unemployed. Part I & II of the tool had high reliability with Chronbach's alpha of 0.91 and 0.93, respectively. The reliability of each of the 9 domains of information to manage own health; ability to find, understand good health information, appraisal of health information; active engagement, feeling understood and feeling supported by healthcare providers; navigating the healthcare system and social support for health ranged between 0.73 to 0.89. Fit statistics for the one-factor model tested using Chi square, Tucker-Lewis index, Comparative Fit Index, Coefficient of determination and Root mean-square error of approximation for each of the nine domains were found to have a good level of model fit.

Conclusion: The change from self- administration to interview technique of data collection was made based on the experience through testing of tool in 30 participants, literacy rate (which is only 19.9% in rural Chandigarh) and previous studies. For initial validation of this tool, CFA method had been used, to which our results were quite comparable and had good reliable fit as per the indicative threshold values. Health literacy is a new concept in India and validity of tool will help in identifying health literacy needs of Indian communities.

Keywords: Validity, Reliability, Rural, Adults.

P50.

Knowledge, attitude, practices of nurses and the relative factors on prevention of Hepatitis B

Nguyen Thi Anh Ngoc 1, Tseng, Chia Chen 2

1. Department of nursing, Thu Duc District Hospital, Ho Chi Minh city, Vietnam

2. Meiho University, Pingtung County, TaiWan

Background: Vietnam has a high prevalence of hepatitis B; an estimated 8.6 million people are infected with the hepatitis B virus.

Nurses doing regular care contact with blood and blood products of patients should be very easily infected with the hepatitis B virus.. Therefore, more than anyone else, most health care workers are direct caregivers who need to have the knowledge, attitude and practice to strictly adhere to the prescribed measures and procedures when exposing to the patient's specimens, especially patients with HBsAg (+), first protects them and then protects the community from infection.

Objective: The overall purpose of the study was to explore the knowledge, attitude, practices of nurses and the relative factors on prevention of hepatitis B.

Methods: This is a cross-sectional study and 206 nurses of Thu Duc district hospital in Vietnam were interviewed with structured questionnaires. Questionnaires included demographic characteristics, knowledge, attitude, practices of nurses on prevention hepatitis B. Independent sample, T-test, ANOVA, Pearson's correlation, and regression model were used to analyze data.

Results: (1) The proportion of nurses with proper knowledge about hepatitis B prevention is generally high (74.3%), the positive attitude of nursing care about hepatitis B is relatively low (44.2%), proportion of proper nursing practices for prevention of hepatitis B is moderate (50%). (2) Departments and educational level are associated with knowledge of hepatitis B prevention of nurses; Gender, departments and educational level are related to attitude of hepatitis B prevention of nurses; Age and educational level are associated with practices of hepatitis B prevention of nurses. (3) Nursing knowledge, attitude and practices about preventing hepatitis B were positively correlated and statistically significant.

Conclusion: Nurse's knowledge, attitude and practices is an important factor on preventing hepatitis B. The findings from this study have provided the foundation for education to enable nurse to improve their knowledge, attitude and practices on preventing hepatitis B.

Key words: knowledge, attitude, practices, nurses, prevention, hepatitis B

P51.

Health capacity and related elements on outpatients \geq 40 years at Thu Duc district hospital in 2017

Nguyen Xuan Dung 1, Le Thi Sinh 2

1. Deputy head of orthopedic department, Thu Duc District Hospital, Ho Chi Minh city, Vietnam
2. Scientific research and international relations office, Thu Duc District Hospital, Ho Chi Minh city, Vietnam

Background: Health capacity is defined as the access, understanding, evaluation and application of health information to judge and make decisions of individuals regarding health care, disease prevention and improve health daily to maintain and improve the quality of life. Health capacity is increasingly concerned as an important issue in public health.

Objectives: Determine the level of health capacity and some related factors in outpatients aged \geq 40 years at Thu Duc District Hospital in 2017

Methods: Using cross-sectional study on 602 patients aged \geq 40 years visiting Thu Duc District Hospital from June to December 2017 with a direct interview with pre-structured questionnaires, build on the questionnaire of the Asian Health Literacy Association.

Results: The proportion of outpatients aged \geq 40 years visiting Thu Duc District hospital was 73.1%. In particular, the proportion of women is 75.3% and men 69.1%; the age group \geq 70 years has the highest rate of restricting health capacity with 88.1%. High age, low education level and less workout are factors that affecting health capacity.

Conclusions: Patients with limited health capacity account for a high proportion. Factors related to health capacity include: age, education level and workout frequency.

Keywords: Health capacity, Thu Duc District hospital.

P52.

Knowledge, attitudes and practice about managements of blood pressure of hypertensive patients in Hai Phong Medical University Hospital

Le Tran Tuan Anh 1, Nguyen Thi Tham 1, Nguyen Thi Thuy Hieu 2, Mai Thu Ha 2, Trinh Thanh Xuan 1.

1. Faculty of Public Health, Hai Phong University of Medicine and Pharmacy, Vietnam
2. Department of Family Medicine, Hai Phong University of Medicine and Pharmacy, Vietnam

Background: Hypertension is a major public health problem due to its high prevalence all around the globe. Around 7.5 million deaths or 12.8% of the total of all annual deaths worldwide occur due to high blood pressure. It is predicted to be increased to 1.56 billion adults with hypertension in 2025.

Objectives: Describe knowledge, attitude, practice as well as some factors related to blood pressure management of outpatient hypertensive patients at Hai Phong Medical University Hospital.

Methods: A cross-sectional survey on 255 hypertensive patients at outpatient department in Hai Phong Medical University Hospital. Using a structured interview included questions about knowledge, attitudes and practice (KAP) and measuring height, weight, belly circumference and blood pressure of patients. History of disease combination and target organ damage (follow the treating doctor's opinions). Evaluation of hypertension according to 2018 guidelines of Vietnam Heart Association, belly circumference assessment according to WHO 2000 applied for Asia - Pacific region. Abdominal obesity when belly circumference \geq 90cm for men and \geq 80cm for women. Evaluate the compliance level of using antihypertensive drugs according to Morisky Medication Adherence Scale (MMAS-8). Patients who scored 8 points, 6-7 points and $<$ 6 points on the scale were considered to have high, medium and low adherence, respectively.

Results: 56.5% of patients knew about criteria for diagnosis of hypertension. 65.1% of patients knew about complications of hypertension. 72.5% of respondents believed that hypertension was an incurable disease. The percentage of respondents who had a diet high in salt up to 90.2% and 12.9% of patients did not comply with drug treatment. Some factors that affect the uncontrolled blood pressure to achieve treatment goals were: combination disease with hypertension (OR=2.38, $p<$ 0.05), physical activity $<$ 30 minutes/day (OR=2.73, $p<$ 0.05); medium adherence drug treatment (OR=1.70, $p<$ 0.05). Other factors such as gender, BMI, belly circumference, knowledge of hypertension, salty eating did not affect blood pressure control.

Conclusions: The percentage of poor knowledge about hypertension is still high, so it is necessary to strengthen counseling and health education to improve knowledge for hypertensive patients.

Keywords: KAP, hypertension, patients, Haiphong

P53.

Internet addiction and related factors among medical students

Nguyen Minh Tu 1,* , Tran Thi My Huyen 1, Vo Thi Thao 1, Tran Thi Hoa 1, Tran Thi Thanh Hong 1, Phan Van Sang 1, Nguyen Thi Kieu Khanh 1, Vo Thi To Nga 1, Trinh Thi Viet Hang 1, Pham Thi Kim Nhung1, Khuong Thi Quynh 1, Nguyen Thanh Gia 1, Tran Binh Thang 2

1. Hue University of Medicine and Pharmacy, Hue city, Vietnam
2. National Cancer Center Graduate School of Cancer Science and Policy, South Korea

Background: Currently, Internet addiction (IA) (social networking, game addiction) are found to be common in young people. The person with Internet addiction will not be able to focus on work and study, memory loss, sleep disorders, reduced quality of life, depression, anxiety, stress, and suicide. This study aims to obtain the prevalence of IA among medical student and also determine the association of the different factors with IA.

Objectives: A cross-sectional descriptive study of 439 medical students to determine the rate of Internet addiction of medical students and explore some factors related to internet addiction to give some solutions.

Methods: We, hereby, conducted a cross-sectional descriptive study, which included 439 medical students was recruited in answering questionnaires including related factors, short-form of Internet Addiction Test (s-IAT). The short form consists of 12 items to evaluate two factors including loss of control/time management and impairment in performance/ social issues. The short form consists of 12 items with good psychometric properties. The participant used a 5-point Likert scale to indicate their responses ranging from 1 ("never") to 5 ("always") and the scores ranged from 12 to 60 points. Results: Results from this cross-sectional study showed that 29.6% of participants suffered from IA. Factors were significantly associated with IA including the lack of attention of academic advisors (OR=2.57, 95%CI: 1.13-4.97), had well planned and timeline for learning (OR=0.56; 95%CI: 0.34-0.92); do not have a habit of reading in leisure-time (OR=1.20, 95%CI: 1.26-3.09), habit of no preparation for exam (1.76; 95%CI: 1.08-2.90).

Conclusions: IA is a common problem among medical students. Our finding suggests that students need the attention of academic advisors, study plans for themselves and create good habits such as reading books in their free time, outdoor activity to prevent internet addiction.

Keywords: Internet addiction, Medical students, Academic advisor

P54.

Knowledge and Practice on Food Safety Among Housepersons in Hue City, In 2017

Nguyen Thi Anh Chi 1, Nguyen Trung Thanh 1, Nguyen Thi Ngoc Dieu1, Trinh Thi Xuan Hang 1, Vo Hoc Thuc 1, Tran Thi Kim Vuong 1, Tran Thi Hoa 1, Tran Thi Thanh Hong 1, Pham Thi Kim Nhung 1, Phan Van Sang 1, Tran Binh Thang 2, Nguyen Thanh Gia 1, Nguyen Minh

1. Hue University of Medicine and Pharmacy;
2. NCC Graduate School of Cancer control and Policy, Korea

Background: Nowadays, foodborne diseases become more attention and concerned for the whole society and a threats for public health. The main houseperson in the family plays a very important role in food hygiene and safety issues to process safe and healthy foods.

Aims: A Cross-sectional study was conducted with the objectives of obtaining the knowledge - practice of housepersons on food hygiene and safety in different aspects and to identify some associated factors. Methods: Regarding the cross-sectional study, the interviews was conducted at the household. The sites of study was carried out in two wards with 440 participants in the Hue city.

Results: There was 67.7% of houseperson have a good level of overall knowledge on food safety, 61.4% of housepersons had a good practice of food safety. Results from multivariate logistic regression models show that the higher the level of education were positively associated with the better the knowledge is compared to the primary school education group with the odds ratio following OR = 2.87 times, p-value<0.05 for secondary school education and OR = 3.6 times, p-value <0.05 for the upper secondary school group; Having better economics condition had a better knowledge than poor households with an OR = 4.44 times, p-value<0.05. Meanwhile, the overall practice also has a statistically significant relationship with education level, family economy and knowledge of food safety with an odds ratio of 3.02 times (secondary school education), 2.49 times (junior high school and higher); 3.28 times (well-off economy); and 6.01 times (having a good knowledge on food safety).

Conclusions: The findings show that it is necessary to strengthen the programs on education on food hygiene and safety and hygiene both in terms of food selection and food safety at home, especially in processing areas. Food and food preservation for households with low socio-economic conditions.

Key words: Knowledge, practice, food safety, home-makers

P55.

Occupational noise exposure in relation to hypertension: a cross-sectional study in fishermen

Nguyen Phuc Thanh Nhan 1,2, Twisuk Pungpeng 2, Le Dinh Duong1, Truong Nhu Son 3, Than Minh Tri 3, Ha Van Anh Bao 4 ,Tran Minh Huan 4

1. Institute for Community Health Research, Hue University of Medicine and Pharmacy, Hue University, Vietnam
2. Faculty of Public Health, Thammasat University, Thailand
3. Phu Vang district health center, Thua Thien Hue, Vietnam
4. Faculty of Public Health, Da Nang University Of Medical Technology And Pharmacy, Vietnam

Background: Fishermen work in an unfavorable working environment, face disadvantages such as harsh weather conditions, prolonged working time with hard labor and are effected by adverse environmental factors, in which noise is the most common agent but there are very few studies on the effects of noise to fishermen's health especially on blood pressure.

Aims: (1) Evaluate the exposure of fishermen to occupational noise on fishing ships and (2) determine the association between noise exposure and hypertension.

Methods: A cross-sectional study was conducted on 159 fishermen who were working in 14 offshore ships Phu Vang district, RION NL-52

was used for noise measurement and the noise exposures were calculated based on the time weighted average in 8 hours working, blood pressure were collected by trained local doctor.

Results: 71.1% fishermen are bearing the working noise which is over 85 dBA for eight working hours a day. The highest average sound level was recorded in the engine room with 93.9 dBA (min-max: 91.8-96.2), follow by driving cabin (85.8 dBA; min-max: 83.1-92.2). Blood pressure measurements gave result with 28.9% hypertensive fishermen. By using logistic regression model with generalized equation estimating, there was insignificant different between noise exposure and hypertension. High body mass index, family disease with hypertension and working longer time as a fisherman increased the risk of hypertension.

Conclusions: It can be concluded that almost three quarters of the fishermen exposed to noise in the working environment exceeds the standards. Application of noise control measures using engineering methods, work management and PPE using are extremely urgent to reduce harmful effect of noise on the fishermen's health.

Keywords: fishermen, noise exposure, TWA8, hypertension

P56.

Medical literacy of handicapped cancer patients

A.M. Aringazina 1, S.T. Olzhayev2, B.S. Khegay 1

1. Kazakhstan's medical University, Kazakhstan.
2. Almaty Regional Oncology Dispensary, Kazakhstan.

Background: Health literacy is a key determinant in the development of non-communicable diseases. Therefore, improving medical literacy among handicapped cancer patients is an additional tool to increase the lifespan and quality of life.

Objectives: The aim of this study is to research medical literacy among handicapped cancer patients in the issues of physical rehabilitation and their adherence to a healthy lifestyle and its further maintenance.

Methods: Individual interviews were conducted with handicapped cancer patients who live in the Almaty region. The study involved 62 patients, 20 men and 62 women (50 breast cancer, 32 colorectal cancer). The mean age of the men was 61,6 ±1,7 years; the mean age of the women was 52,5 ±1,5 years. Individual interviews were conducted with the WHO QOL-100 and Newest Vital Sign (NVS). Primary interventions provided were education about the healthy lifestyle, physical activity promotion, exercise prescription. After 3 months, patients were interviewed again.

Results: The results of the QOL-100 survey showed that 19 men out of 20 and 56 women out of 62 noted a moderate satisfaction with the opportunities for acquiring the information that they need. The results of the NVS survey indicated the possibility of limited literacy in 17 men and 47 women among the respondents.

Conclusion: Health literacy of handicapped is limited in 85% of men and 75% of women, although, they enthusiastically participated in the survey and in the conversation. After 3 months, 55% of the participants continued to maintain a healthy lifestyle. The cancer patients have limitations in medical literacy and need additional training.

P57.

A Study of the Correlation among Resilience, Over-commitment , and Sleep Quality with Different Levels of Hospital employees

Chia Min,Chiu 1, Hsin Cheng,Chen 2,

1 Lutheran Medical Foundation Kaohsiung Christian Hospital (No. 86 Huaxin Street, Yuya District, Kaohsiung City 80247 Taiwan)

2 Chi Mei Medical Center (No.901, Zhonghua Rd.Yongkang Dist., Tainan City 71004 Taiwan)

Background: Lack of recovery will significantly reduce our collective ability to maintain resilience and success. Just stopping work doesn't mean we are recovering. Driven by uncontrollable work motivations, over- commitment to work, betting too much time and energy on the job, thus damaging other important aspects of life, especially in sleep quality.

Aims: This study examined the relationships between resilience, Over-commitment, and sleep quality with 3 different levels of hospital employees. The hospital levels from large to small: medical center, regional hospital, and district hospital.

Methods: The methodology was mainly based on questionnaire survey that used Likert five-point scale. A sample of 1,297 employees participated in the study.

Results: Descriptive statistics showed that: 1.The mean of resilience: the district hospital is the highest; 2.The mean of over-commitment: the medical center is the highest; 3.The mean of sleep quality: the district hospital is the highest.

Correlation analysis showed that: 1. Resilience and over-commitment were both existed significantly negative correlation; 2. Resilience and sleep quality were both existed significantly positive correlation; 3. Over-commitment and sleep quality were both existed significantly negative correlation. In the indirect effect, the relationship between resilience and sleep quality is partially mediated by over-commitment. Conclusion: The key to recognizing the way to build your own resilience is that we need to spend time exploring the strategies that are right for us to spur our resilience. We can arrange to fix or not fix a short break, then turn our attention to other things.

To reduce over-commitment to work, we let the shift medical staff participate in the scheduling mechanism and understand the situation after the shift. If we can't find a breakthrough in our work, then social and sports will be a powerful solution to help sleep quality.

In addition, it is possible to clearly identify the priorities of the matter, and set a stop loss point of the working length, and reserve time to rest, in order to play the work value more effectively and stably.

Keywords: resilience, over-commitment, sleep quality

P58.

One-year predictors of decline in instrumental activities of daily living function among community-living elderly adults

Masayuki Soma 1, Shin Murata 2

1. Course of Rehabilitation, Department of Health Sciences, Tohoku Fukushi University, Japan.
2. Department of Physical Therapy, Faculty of Health Sciences, Kyoto Tachibana University, Japan.

Background: Previous studies suggest that the performance on 30-s chair-stand test relates not only to lower-limb muscle strength but also to falling risk. However, no research has examined how performance on this test relates to IADL function.

Aims: This study sought to examine several physical fitness metrics as one-year predictors of IADL decline, including performance on the 30-s chair-stand test.

Methods: 138 elderly adults were recruited from fitness meet attendees for two consecutive years, in 2014 and 2015 (age:74.3±5.4 y). IADLs were assessed using the TMIG-IC (Tokyo Metropolitan Institute of Gerontology Index of Competence). Physical function was measured using the following tests and indicators: the 30-s chair-stand test, one-leg balancing test, maximum walking speed, timed up-and-go (TUG) test, seated front stretch, crunches, grip strength, quadriceps strength, and toe grip strength.

The 2014 fitness data was compared between two groups, defined based on their TMIG score in 2015 versus 2014: subjects whose scores had stayed constant or improved (TMIG-I/M group: Improved/Maintained), and whose scores had worsened (TMIG-D group: Declined). Logistic regression analysis was conducted to assess the predictive value of fitness indices that were significantly different between the two groups (Mann–Whitney U: explanatory variables) on TMIG-D group membership (response variable).

Results: In total, 112 and 26 of the 2015 fitness meet attendees belonged to the TMIG-I/M and TMIG-D groups, respectively. Mann–Whitney U showed significant differences between 2014 and 2015 in 30-s chair-stand test, one-leg balancing test and TUG test. The only significant predictor of TMIG decline detected by logistic regression analysis of the three significant factors above was 30-s chair-stand test performance (odds ratio: 0.899 [0.823-0.982]).

Conclusion: 30-s chair-stand test performance was confirmed as predictor of one-year decline in IADL functioning, with a 1.112-fold increase in said risk for every one-rep decrease.

Keywords: Health literacy in Japanese community-dwelling older adults

Keywords: instrumental activities of daily living, 30-s chair-stand test, elderly adults

P59.

Postpartum depressive symptoms and associated factors among married women in a city, central coast, Vietnam

Nguyen Thi Thin 1, Vi Tran Thao 3, Nha Dang Thi Thanh 2, Thang Vo Van 2,3

1. College of Medicine, Quang Nam province, Vietnam
2. Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam
3. Institute for Community Health Research, Hue University of Medicine and Pharmacy, Vietnam

Women's postpartum depression is a mental health concern occurring at a time of major life change because of increasing responsibilities in the care of a newborn infant. In Vietnam, depression after giving birth has not been fully investigated in the general population. Research by Fisher, Tran et al (2011) in Northern provinces, and Murray, Dunne, Vo and Cao (2014) in Hue city and Vo, KH. Duong et al in Da Nang city (2017) suggests postnatal depressive symptoms are quite common. The present research aims to (1) estimate the prevalence of postnatal depression among married women in Tam Ky city and (2) identify possible social and individual determinants.

This cross-sectional analytical study was conducted from July 2018 to December 2018 in a selected Tam Ky city, Central Vietnam. There were 165 mothers after giving birth from one to six weeks (1- 42 days) was totally selected in this area. Structured questionnaires were designed and used to interview the subjects in six months including

demography and family, obstetric characteristics and history of illness, psychological characteristics and family relationship, postpartum care and child health. The Edinburg Postpartum Depression Scale (EPDS) was used to examine postpartum depression with the cutoff point of 13. Data were processed with SPSS software 16.0.

The EPDS mean score was 7,41 ± 3,49 (95% CI: 6.37 – 7.94) with the lowest and the highest scores being 2 and 16 respectively. EPDS scores indicate the prevalence of PPD is 16.4% (95%CI: 10.66 – 22.07).

Multivariate logistic regression analysis shows the following key factors that significantly associate to PPD: Confide in my husband (OR = 9.20; 95% CI: 2.22 – 38.22), nulliparous women as compared with others in gravida history (OR = 3.15; 95% CI: 1.22 – 8.09), and mother's difficulty in breast feeding practice (OR = 4.02; 95% CI: 1.52 – 10.59). The findings will be interpreted in relation to other recent researches in Vietnam; a consistent pattern of prevalence estimates and predictors is emerging that has implications for postpartum care for mothers.

Keywords: Postpartum depression, Edinburg Postpartum Depression Scale, Mental health, Associated factors.

P60.

Implementation of the comprehensive unit based safety program (cusp) in a tertiary care hospital

Karthikayini Krishnasamy 1, Tan Maw Pin 2, Mohd Idzwan Zakaria 3

1. Department of Nursing, University of Malaya Medical Centre, Malaysia
2. Faculty of Medicine, University of Malaya, Malaysia
3. Department of Emergency Medicine, Faculty of Medicine, University of Malaya, Malaysia

Background: In Malaysia, there was a remarkable increase in the number of patient safety incidents being reported via e-IR (electronic incidence reporting) with the total of 5,689 incidents in 2017 compared to 2016 figure of 2769. Fall incident was highly reported in this study hospital and it became a major concern in many wards due to various reasons.

Aims: In view of the increasing incidents, a prospective observational study was carried out to evaluate the existing level of patient safety culture among the healthcare providers and to identify the area for patient safety improvement.

Method: Safety assessment questionnaire (SAQ) consists of 36 items measuring 6 domains were used to assess the safety culture. Based on the results obtained, CUSP was implemented in the wards.

Results: A positive percentage agreement value of more than 60 was considered as the expected target value of safety culture. The teamwork and safety climate were very poor in supporting staffs of the hospital wards, which were 56.7 and 59.8 respectively. Job Satisfaction, perception on unit and hospital management, and working conditions were very less among the clinicians of the hospital, the recorded positive percentage agreements were 62.9, 56.8, 53.2 and 44.7 respectively. Moreover, the stress recognition (36.5) was in alarming situation among the nurses who tirelessly working around the clock. CUSP was implemented where there is problem of safety in terms of number of fall incidents in the wards that was a major problem observed in the study area. Prior implementations of CUSP, there were 173 and 180 fall incidents in the years 2016 and 2017

respectively, but it was reduced to 135 after successful implementation of CUSP.

Conclusion: A comprehensive assessment of safety culture and implementation of CUSP are warranted to prioritize the area that needs immediate attention to reduce the patient safety issues.

Keywords: Safety, teamwork, falls, hospital, stress.

P61.

Views and use of generic medicines in Baguio City, Philippines: A cross-sectional study with physicians

Mary Luz C. Fiangaan 1,3, Jaime T. Ballena 2, Gaston P. Kibiten 2, Rhoda S. Lumang-ay 1, Mary Grace S. Martin 1.

1. Department of Pharmacy, School of Natural Sciences, Saint Louis University, Baguio City, Philippines
2. Research and Development Office, Saint Louis University, Baguio City, Philippines
3. Corresponding author

Background: Physicians' knowledge, attitude, and perceptions about generic medicines represent essential factors that may promote or impede greater generic medicines use. With mixed results from several studies exploring the understanding and views of physicians towards generic medicines, it is necessary to recognize their perspective in a particular locality.

Aims: This study aimed to explore physicians' understanding and perception towards generic medicines, the extent of generic prescribing, and attitude towards generic substitution. The results would help in establishing generic medicine policies, especially in areas where less costly medicines allow for greater access to the majority of the population.

Methods: A descriptive, cross-sectional study was conducted among practicing primary care physicians and specialists in Baguio City, Philippines (n=150) using a paper-based questionnaire. Descriptive statistics were used to assess physicians' knowledge, perception, and attitude, and Pearson correlation analysis was used to determine relationships among variables.

Results: With a mean score of 3.9/5.0, outcomes show that physicians in Baguio City are knowledgeable regarding generic medicines, but only a few (18.5%) 'always' practice generic prescribing. Negative perceptions of generics (2.4/4) are apparent. However, physicians are amenable to generic substitution (2.8/4) provided that the pharmacists consult with the prescriber first. There are significant positive correlations between the level of knowledge and the extent of generic prescribing (p= 0.008). Similarly, significant positive correlations between the perception of generic medicines and years in practice (p= 0.001), and attitude towards generic substitution (p< 0.001) are evident.

Conclusion: Overall, physicians in Baguio City are knowledgeable regarding generic medicines, and have a positive attitude towards generic substitution. It is imperative that the prescribers are educated regarding bioequivalence, and be assured of the quality, safety, and efficacy of generic products to increase generics use. Collaboration among pharmacists and physicians is also essential to improve confidence in the generic substitution practices by pharmacists.

Keywords: generic medicines, generic prescribing, generic substitution

P62.

Factors associated with hypertension literacy in Punggelan health center I Banjarnegara District Central Java Indonesia

Sri Andarini Indreswari, Wenny Malissa, Sri Handayani

Department of Public Health, Universitas Dian Nuswantoro, Indonesia

Background: Chronic non-communicable diseases (NCDs) have become an enormous health burden in low- and middle-income countries. The three top causes of death in Indonesia are stroke (21.2%), ischemic heart disease (8.9%), and diabetes mellitus (6.5%). Hypertension cases were found in Primary Health Care.

Aims: The prevalence of hypertension is high as 25.8% (Indonesian population aged ≥ 18 years 665,920 from a total sample 1,027,763). The aimed of this study was to determine the factors associated with hypertension literacy in the working area of Punggelan I Health Center, Banjarnegara District, Central Java.

Methods: This was a quantitative study with a cross sectional approached. The research instrument used a questionnaire. Variables were analyzed by univariate and bivariate with the Chi Square test. The sample of this study amounted to 223 respondents whose head of families.

Results: The results showed hypertension literacy studied were easy to obtain information about hypertension from health workers (> 55%), knowing foods should be avoided to prevent hypertension (60%). They also understand the difference between normal tension and hypertension (> 60%). Easy to decide not to smoke (> 60%), but very difficult to follow and do sports activities in groups (> 63%). In bivariate analysis the results of variable related to hypertension literacy were obtained consisting of age (p-Value = 0.027), gender (p-Value 0,000), work (p-Value = 0.002), education (p-Value = 0.035), source of information (p-Value 0,000), knowledge (p-Value = 0,000) and practice (p-Value = 0,013) While unrelated variables consist of hypertension status and income.

Conclusion: For Institutions, there is a need for counseling and socialization regarding symptoms of hypertension and screening for measuring blood pressure in work areas of Health Center. For the next researcher needs on the culture or tradition of the community.

Keywords: Literacy, Hypertension, Health Center

P63.

Attitude Towards Contraceptive among Indonesian Students

Sri Handayani 1, Cinantya Paramitha 2, Rosanda Mulic 3.

1. Department of Public Health, Universitas Dian Nuswantoro, Indonesia
2. Department of Informatics Technology, Universitas Dian Nuswantoro, Indonesia
3. Faculty of Maritime, University of Split, Croatia

Background: Indonesian adolescent has been facing social construction change from traditional society into modern society. This affected the change of value, norm and lifestyle among youth. Each year, Indonesia has 2 million women die which 50% caused of unsaved abortion. The use of contraception among youth is still taboo, based on religious believe having sex before marriage is wrong. This study aimed to assess attitude towards contraception among Indonesian students.

Methods: Study has been done in Universitas Dian Nuswantoro Semarang with 269 participants in total came from five faculties.

There was no special inclusion applied. Data has been obtained with online survey by google form distributed in one-month period (March-April 2019). Attitude questionnaire by Dr. Kelly Kyes was used and translate into Bahasa. The questionnaire was translated back and forth to validity and reliability. Participants was voluntary participated the survey by fill an informed consent.

Results: Majority the participants were female (61%) and only 32% were in relationship. Two highest proportion of participants were coming from Faculty of Health Sciences (47,2%) and Faculty of Computer Science (42,8%), followed by Linguistic Faculty, Economic and Business Faculty, and Faculty of Technology. Majority respondents were in the second year of study, only 21,9% were in the first year. Female have more permissive attitude (62,9%) than male on contraceptive. 21.9% of participants agree that males who use contraceptive seem less masculine than males who do not. More than half respondents agree that contraceptive encourage promiscuity. Participants with relationship status showed more permissive (61,6%) and participants in Faculty of Health Sciences more permissive in contraceptive attitude (70,1%). Statistic showed that attitude towards contraceptive among students has significant correlation with Faculty they studied ($p:0,0001$).

Conclusion: The research concluded that more students understand and get exposure of the aims of contraceptive they will be more likely being permissive. Students who study in non-health field should get education about contraception.

Keywords: Attitude, Contraceptive, Students

P64.

Using Facebook Page Insights to Analyze User Engagement in a Facebook Page for Public Health Education

Ourlad Alzeus G. Tantengco 1, Noel R. Juban 2.

1. MD-PhD Molecular Medicine Program, College of Medicine, University of the Philippines Manila, Philippines.
2. Department of Clinical Epidemiology, College of Medicine, University of the Philippines Manila, Philippines.

Background: Facebook remains to be the most widely used social networking platform in the Philippines and in the world. There is considerable evidence on its use in health promotion and education. Thus, the Facebook page Doktor Doktor Lads (DDL) was established on December 2015 to share free information about health online.

Aims: We aim to inform the healthcare professionals, organizations and researchers on how Facebook page insights can be used to increase user engagement through analyzing the demographics, online activity, preferences of the followers and the most viral and talked about posts in DDL.

Methods: Demographics of the audience and key metrics of reach, engagement, and virality of the posts were analyzed using descriptive and analytical statistics to look for patterns and factors that can be used to increase reach and engagement of health-related posts from DDL.

Results: Majority of followers of DDL are females (75%), 25-34 years old (41%), living in the Philippines (86.3%) and speak English and Filipino (99.5%). They are most active online from 7 PM to 11 PM. Posts with photos and videos received more engagement compared to status update and website links ($p = 0.019$). Almost 50% of the most viral posts in DDL are about diseases that are more common among

women. We determined a positive correlation between the number of Facebook posts per month and the number of users reached ($r = 0.74$, $p = 0.00004$). However, this did not have a significant correlation with increased engagement ($r = 0.17$, $p = 0.44$).

Conclusion: This study serves as a guide for individuals or organizations planning to start a Facebook page for health promotion and education. This study gives information and recommendation on how doctors or health organizations can use Facebook page insights to analyze user engagement and use it to strategically increase Facebook page's reach and impact online.

Keywords: Facebook, social media, healthcare, health communication, public health education

P65.

Health and well-being during pregnancy of women with physical disabilities in Vietnam

Thi Vinh Nguyen, Julie King, Niki Edwards, Michael Dunne
Queensland University of Technology

Background: There is a dearth of research investigating on pregnancy and childbirth of women with physical disabilities (WWPD), particularly in low-and middle-income countries where 80% of people with disabilities live. Aims: To explore how Vietnamese WWPD experienced their pregnancy, with a focus on their health and well-being during pregnancy. Methods: The study was conducted in Hanoi and Thaibinh, Vietnam. Participants were 29 women with physical disabilities who had given birth in the past three years. In-depth interviews were conducted at two time points with those women. NVivo software was used to support the thematic analysis. Results: This study found that WWPD experienced several physical and mental health issues during pregnancy. For physical health issues, WWPD reported many disability-related symptoms during their pregnancy, including extreme pain especially related to their impaired body parts, constipation, heightened risk of falling, and unfit to their usual mobility aid. Their body changes due to pregnancy also meant that physical transfers and mobility around their home and surrounding environment became more difficult. For mental health issues, WWPD lived with the anxiety and stress about the transmission of disability that was enforced by perceptions and comments from the community and heightened when the prenatal screening tests identified fetal abnormalities. Conclusion: Health and well-being of WWPD were significantly impacted during pregnancy. The women should be aware of these issues and have an advanced plan to reduce and manage these impacts. Healthcare providers should made the counselling services on health and well-being during pregnancy and the risk of disability transmission available and accessible for WWPD. Keyword: disabilities, health, well-being, pregnancy, Vietnam

P66.

Construct a Smoking Cessation Program for the Patients in Hospitals

Cheng-Yu Chen

Dept. of Internal Medicine, St. Joseph's Hospital, Yunlin, Taiwan;
National Taipei University of Nursing and Health Sciences, Taipei, Taiwan

Background: Health literacy is very important in health education. The associations between health literacy and willingness of smoking cessation is possible high, therefore we designed an outpatient training program for promoting smoking-related health literacy. The

ultimate goal is to build up an effective smoking cessation intervention for the patients in hospital.

Methods: We conducted a prospective study to teach health literacy to the outpatients in St. Joseph's Hospital during Jan to Jun, 2019. The teaching subjects include smoking hazard knowledge, symptoms of nicotine dependence, smoking cessation methods, self-confidences and intentions in quitting smoking, smoking outcome expectancies). A multivariate linear regression analyses was used to disclose the possible effective models for pursue pursued smoking cessation patients in hospital.

Results: The fitted linear regression model used to identify the relationship between a successful smoking cessation and predictor variables of interventions revealed a R² of 0.82 (i.e., the model explains 82% of the outcome). The individual variable indicates that good health literacy, more exercise, low nicotine dependence, high self-confidence all contribute to the smoking cessation outcomes. While smoking hazard knowledge does not guarantee a successful outcome.

Conclusion: Health literacy, exercise and self-confidence are important for smoking cessation in the outpatients. Research is needed to investigate potential effectiveness in hospitalized patients.

P67.

Depressive disorder and some related factors among students at Quoc Tuan High School, An Lao District, Hai Phong in 2018

Trinh Thanh Xuan, Tran Thi Thuy Ha, Le Tran Tuan Anh
Faculty of Public Health, Hai Phong University of Medicine and Pharmacy

Background: According to the World Health Organization (WHO) in 2015, depressive disorder is a common mental health problem in adolescents worldwide, with an estimated 1 year prevalence of 4–5% in mid to late adolescence. Depression in adolescents is a major risk factor for suicide, the second-to-third leading cause of death in this age group.

Objectives: Describe the prevalence and some factors related to depressive disorder among students of Quoc Tuan High School, An Lao District, Hai Phong in 2018

Method: This was a cross-sectional study which was conducted with 251 high school students in 2018/19. The information was collected by a set of pre-designed questionnaires consists of 2 parts. Part 1 includes 25 questions about demographic characteristics and some related factors of research participants. Part 2 was designed base on Reynolds adolescent depression scale (RADS) which was Vietnameseized by experts at the National Institute of Mental Health. The RADS is a brief, 30-item self-report measure that includes subscales which evaluate the current level of an adolescent's depressive symptomatology along four basic dimensions of depression: Dysphoric Mood, Anhedonia/Negative Affect, Negative Self-Evaluation, and Somatic Complaint in a Likert response with 4 options from 0-3. Evaluate depressive disorder according to the overall score obtained (the lowest is 0, the highest is 90 points). Specifically: <31 points is normal, 31-40 points is a mild depressive disorder, 41-50 points is moderate depression, >= 51 points is a major depressive disorder. SPSS Statistics 22.0 software was used to input and analyse the collected data.

Results: The prevalence of depressive disorder among high school studnets was 28.7%, of which the percentage of depression of the

12th graders is the highest (35.8%), Students primarily suffer from mild depressive disorder (22.3%). Factors associated with depressive disorder such as parent separation/divorce (OR = 2.57, 95% CI: 1.18-5.63, p <0.05), family interest (OR = 2.29, 95 % CI: 1.21-4.33, p <0.05 and OR = 4.36, 95% CI: 1.61-11.7, p <0.05), family conflict (OR = 3.02, 95% CI: 1.66-5.50, p < 0.05). There is no relationship between gender, study result, grade and depressive disorder.

Conclusion: The findings of this study concluded that the prevalence of high school students with depressive disorders is quite high and there are many factors related to the proportion. The knowledge of parents need to be improved, create a comfortable environment in each family will contribute to reduce the rate of diseases among their childrents.

Keywords: Depressive disorders, high school students, Haiphong.

P68.

Factors Associated With Satisfaction Among Patients Achieving Out Patient Department (OPD) Service In Kham District Hospital, Xiengkhouang Province, Lao PDR

Vanese Manivone, Chansathit Taikeophithoun, Visanou Hansana
Faculty of public health, University of health sciences, Ministry of health

Background: Satisfaction of the patients receiving the outpatient service is an important public health issue to ensure that the clients are coming to use the services at the hospital. Previously, there were complaints in the outpatient services.

Aims: This study aims to address the factors affecting the satisfaction of the patients who received the outpatient services at the district hospital in Xiengkhouang province.

Methods: An analytical cross-sectional with enrollment 326 patients. The random sampling is based on the data collection. Analyzed by STATA13 and the inferential statistic, using the Multiple Logistic Regression statistics to determine the relative implications for medical benefits and the Adjust OR (95% CI) was reported.

Results: 51.8% for males, mainly was Buddhism, with a 4.3 or higher degree of college / university education (OR = 4.3, 95% CI: 0.9-19.1), use of equipment, tools and diagnostic tools that are more than 3,4-fold (OR = 3.4, 95% CI: 1.7-6.8), in the waiting room in the clinic. OR = 1.1, 95% CI: 0.7-1.8), while waiting for a doctor (not exceeding 20 minutes), with less convenience than 1.8 times (OR = 1.8, 95% CI: 1.1-3.6), during the waiting period for less than 15 minutes (less than 15 minutes), conveniently less than 16.1 (OR = 16.1; 95% CI: 7.1-36.5).

Conclusion: This study shows that most respondents were satisfied to the outpatient areas and it related to patient satisfaction with characteristics of the population and the availability of services. Therefore, it sold consider for health education. Especially doctors and nurses have proficiency in using the diagnosis of disease.

Keywords: satisfaction, OPD, client, provider

P69.

Health literacy and esophageal cancer nutrition: A Case Report.

Tsai, Hsiu We, Hong, Hong chang, Weng Yih-Chyang, Chen Yun-Fang
Nantou Hospital, Ministry of Health and Welfare

Background: It is important that good nutritional support can improve quality of the life of cancer survivors. It is a strong and commonly held beliefs among nutrition clinicians that enteral nutrition is preferable

to parenteral nutrition ,when the function of the gastrointestinal tract is normal. If a patients, who accepted gastrostomy tube feeding and ileostomy, may meet the problem of the absorption of water and nutrients because of short intestinal tract. It may cause malnutrition and dehydration . We explored a victim, a 68 y/o male, of medical history of esophageal cancer s/p gastrostomy tube feeding , T2DM, HCVD, and anus necrotising fasciitis s/p ileostomy. On July 12, 2018 , he was transfer to nutrition clinic, and complained of thirsty, oliguria, dark urine, and weakness for days. And, his stool color was dark yellow, mixed with white milk. He was fed by four meals per day. His height is 160cm and his weight is 49kg. The dietitian assessed him with nutrition care process .The patient got 1000 kcal per day and 1348cc of total fluid intake. His nutrition problem was not enough calorie intake due to too fast feeding and lacking of water. His nutrition diagnoses were inadequate calorie intake, altered GI function, and inadequate fluid intake. The nutrition plan was 1. adjusted the milk to high protein diet and concentrated formula, 2. slow the feeding rate by adding rice soup and use feeding bag by the feeding rate around 30-60 mins per meal, 3. increasing the total fluid by feeding water between meals by feeding 200ml water three times per day.

Results: On Aug 20,2018 , his symptoms were Improving. The total calorie was increased to 1650 kcal and the total fluid was 2600cc per day . His body weight raised upto 54kg. After dietitian adjustment , the patient's quality of the life elevated after good nutritional support.

Keywords: short intestinal tract, gastrostomy, ileostomy, nutrition care

P70.

Health Literacy and Self-Care of diabetic patients in Nonthaburi, Thailand

Napintorn Sirithai

National Health Commission Office (NHCO), The National Health Commission Building, Thailand.

The Diabetic are currently leading causes of premature death of the world and Thai population. They also significantly contribute to a health burden caused by illnesses and disabilities, as well as generate impacts on socio-economic development. The sedentary lifestyle and consumption behaviour are prioritized as major causes of diabetic. In the digital era, both true and fraudulent health information in communication technology is more, rapid and quickly to access. Therefore, Level of Health literacy of diabetic patients to increase level of individual capability, understand information, skills, and appropriate health decision against diabetic is necessity.

This qualitative study aimed to perception of self-care behaviors pattern of diabetic patients and the learning process, negotiation and self-care powers of diabetic patients. Purposive sampling was used to recruit 5 diabetes patients who have been diagnosed with diabetes mellitus for more than 2 years and the results of blood glucose levels in normal and stable, regularly used service at NCDs clinic of the district health promotion hospital in Nonthaburi province, Thailand. Instruments used were a semi-structured interview questionnaire for individually given in-depth interview and the tape recorder. Data were analyzed using content analysis and description.

The results showed that diabetes patients are aware understand and literate of information and knowledge related to diabetes. Most of them access and search for health information on the internet and have analytical thinking skills to evaluate information and knowledge

health for self-health care or management in communicative/ interactive health literacy level.

Moreover with such knowledge and behavior of self-care pattern, leading diabetic patients to have power in negotiation of self-management for health and well-being.

Keywords: health literacy, self-care, self-health management, self-care behavior, diabetes mellitus

P71.

Health Literacy on Dengue Prevention and Control through Social Media in Thailand

Piyaporn Wangroongsarb, Parimon Onmasen, Adun Chayyaphong, Cheewanan Lounpiliyasuwat

Vector Borne Disease Division, Department of Disease Control, Ministry of Public Health, Thailand.

Background: Nowadays, it is crucial to determine the level of health literacy among the community in Thailand. Technology is booming rapidly from year to year, and this generations are the ones especially caught up in this rapid change. Social media has been utilized in so many different ways throughout the years. The National Dengue Program of the Vector Borne Disease Division, used the social media to facilitate in sending Dengue situations and messages. The Line@Prayoung (meaning: Voluntary killing of mosquitoes) Application tool was disseminated to health volunteers and they motivate and cheer up the people to become concerned the dengue problems in their own and other districts as well.

Aims: To assess the frequency at which the target groups are social networking, and whether it has any effect on their performance regarding dengue prevention and control.

Methods: In this study, the target groups were health volunteers. Focus group discussions with health volunteers using structured questions was done. The study area was selected by cluster sampling form 4 regions and from 5 provinces.

Results: This line@prayoung Application was designed for health promotion strategy and promote the sharing and transfer of health messages to target groups. The total members were 41,247 persons whom are distributed in 77 provinces. Most were Female (79.9%). The Age group were 25-29 yrs. (24.3%). They expressed satisfaction with the image design and the contents as a result of using a simple words was easy to understand, with more pictures and less letters. Some members were found to share the Broadcast or messages for self-awareness on Dengue prevention to their friends. And we received messages their activities been done on reduction of the larvae breeding places in all communities.

Conclusion: It is recommended that this line@prayoung Application be used as a tool in marketing communicate with mass audience, access every age groups. This line@prayoung Application is the platform that give individuals the opportunity to interact, using two way communication; meaning, that anyone who has online accounts can ask and share their opinions with other social media users. We would to develop this tool to improve the quality health promotion on other diseases as well.

Keywords: health literacy, social media, communication, Dengue fever, Thailand.

P72.

Related traffic accident victims due to alcohol abuse treated in Viet Duc University Hospital

Nguyen Duc Chinh, Tran Tuan Anh

Viet Duc University Hospital, Hanoi, Vietnam

Background: Recently many cases related to alcohol abuse when participating in traffic, leading to victims caring on emergency in the health facilities with severe or fatal conditions at the high levels of health care in Vietnam. As tertiary and leading center of surgery in Vietnam, Viet Duc University Hospital (VDUH) annually has received many serious surgical patients, which is mainly due to accidents, and mostly due to traffic accidents. Aim of this study is to evaluate the traffic accident related to alcohol abuse.

Materials and method: All case of related traffic accident were treated on emergency at Viet Duc Hospital during 2018 and first three months of 2019 enrolled. The database is analyzed by SPSS 20.0

Results: in 2018 the traffic accident victims treated in the hospital on emergency were 16.319 cases. The majority of victims were due to severe injuries such as brain injury 42,5%, multiple injuries 34,5%, tested blood alcohol concentration exceeds the permitted level, accounting for 3.5%, male victims accounting in 92%.

In the first 3 months of 2019, there are 3640 cases of traffic accidents were treated on emergency, 262 cases tested blood alcohol concentration exceeds the permitted level, accounting for 7.2%.

Conclusions: We strongly recommend to implement the proper solutions regarding the alcohol abuse when participating in traffic in order to reduce the traffic accident and the mortality.

Keywords: Alcohol abuse, Brain injury, Traffic accident.

P73.

Analysis on ASEAN capacity lead to Universal Health Coverage by 2030

Aung Than Oo

Background: 2019 marked the 52th anniversary of ASEAN, (the Association of Southeast Asian Nations), ASEAN as a collective group of nations has made some impressive progress in the past 50 years, and regional variations remain in the economic and social status of its individual markets. Although CLMV (Cambodia, Lao PDR, Myanmar and Vietnam) markets remain among the least developed (by GDP per capita) in the region. The Association of Southeast Asian Nations (ASEAN) is characterized by much diversity in terms of geography, society, economic development, and health outcomes. The health systems as well as healthcare structure and provisions vary considerably.

Consequently, the progress toward Universal Health Coverage (UHC) in these countries also varies.

Aims: This study aims to describe the progress toward UHC in the ASEAN countries and discuss how regional integration could influence UHC.

Methods: Methodology; data collected from published literature, reports, and literature available in the ASEAN countries. We used both online and manual search methods to gather the information and 'snowball' further data.

Results: In general, we analyzed that ASEAN countries have made good progress toward UHC, partly due to relatively sustained political commitments to endorse UHC in these countries. However, all the countries in ASEAN are facing several common barriers to achieving UHC, namely 1) financial constraints, including low levels of overall

and government spending on health; 2) supply side constraints, including inadequate numbers and densities of health workers; and 3) the ongoing epidemiological transition at different stages characterized by increasing burdens of noncommunicable diseases, persisting infectious diseases, and reemergence of potentially pandemic

infectious diseases. The ASEAN Economic Community's (AEC) goal of regional economic integration and a single market by 2015 presents both opportunities and challenges for UHC. Healthcare services have become more available but health and healthcare inequities will likely worsen as better-off citizens of member states might receive more benefits from the liberalization of trade policy in health, either via regional outmigration of health workers or intra-country health worker movement toward private hospitals, which tend to be located in urban areas. For ASEAN countries, UHC should be explicitly considered to mitigate deleterious effects of economic integration. Political commitments to safeguard health budgets and increase health spending will be necessary given liberalization's risks to health equity as well as migration and population aging which will increase demand on health systems. There is potential to organize select health services regionally to improve further efficiency.

Conclusions: We believe that ASEAN has significant potential to become a force for better health in the region. We hope that all ASEAN citizens can enjoy higher health and safety standards, comprehensive social protection, and improved health status. We believe economic and other integration efforts can further these aspirations.

Keywords: UHC, ASEAN, CLMV

P74.

Associated factors of intimate partner violence and depression among pregnant women in a central region of Vietnam: A rising concern of health literacy approach in Asia

Luong Thanh Bao Yen 1,2, Michael Dunne 1,3, Nguyen Hoang Lan 1,2, Hoang Dinh Tuyen 2, Vo Van Thang 1,2

1. Institute for Community Health Research, Hue University of Medicine and Pharmacy, Hue University, Vietnam

2. Faculty of Public Health, Hue University of Medicine and Pharmacy, Hue University, Vietnam

3. Queensland University of Technology, Brisbane, Australia

Background: Intimate partner violence (IPV) is defined as "any behavior within an intimate relationship that causes physical, sexual or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviors". It has become a major public health concern especially in low- and middle-income countries. In Vietnam, a systematic review which involved 4,598 pregnant women had showed that the prevalence of IPV ranged from 5.9% to 32.5%, in which the prevalence of physical abuse, emotional abuse and sexual abuse were 3% - 8.5%, 6% - 32.5%, and 3.4% - 10%, respectively. Moreover, IPV during pregnancy effects harmful not only on mother but also the unborn fetus. This study is to assess the associated factors of IPV and depression among pregnant women in a city of the central region of Vietnam.

Method: This study is part of the foundational global birth cohort study – Evidence for Better Lives (EBLS) – among eight medium-sized cities from low- and middle-income countries, including Ghana, Jamaica, Pakistan, Philippines, Romania, South Africa, Sri Lanka, and

Vietnam. In Vietnam, we collected data of 150 pregnant women with gestational age from 29 weeks and above, from eight wards of Hue city, via a cluster sampling, from February to May 2019. We used the World Health Organization Violence Against Women Instrument to assess IPV, and Patient Health Questionnaire (PHQ-9) to assess depression. Multivariable logistic regression was used to identify factors associated with IPV and depression in pregnant women.

Results: The prevalence of women who experienced at least one type of IPV during pregnancy was 14.7%. Emotional IPV was reported as the commonest type of IPV (14.0%), followed by physical (2.0%) and sexual (1.3%) IPV. Those who had husbands' education attainment being less than primary school was associated with the odds of experiencing IPV (aOR=4.06, 95%CI: 1.07-15.38). Among those pregnant women, 12.7% experienced moderate to severe depression. Those who experience stress was found to be associated with the odds of developing moderate to severe depression (aOR=1.36; 95%CI: 1.11-1.67).

Conclusion: The findings suggest the needs of screening for IPV, especially emotional IPV, and depression among pregnant women. It also highlights the need for tailored interventions targeting gender equity in order to reduce the risk of IPV among pregnant women. Training programs with an effective health literacy integration on how to behave against violence should be designed for poorly educated husbands.

Keywords: Evidence for Better Lives Study, intimate partner violence, depression, PHQ-9, health literacy.

P75.

Evaluating the reliability and the value of questionnaire assessing patient satisfaction in the satellite polyclinic at Binh Chieu ward medical station, Thu Duc district, in Ho Chi Minh City

Tran Minh Thai * 1, Tang Chi Thuong1, Do Mai Hoa2, Nguyen Van Tap3, Nguyen Quynh Truc4

1 Department of Health of Ho Chi Minh City

2 Ha Noi University of Public Health

3 University of Medicine and Pharmacy, Ho Chi Minh City

4 University of Medicine Pham Ngoc Thach, Ho Chi Minh City

Background: Every year, according to the regulations of the Ministry of Health about hospital quality ratings, including questionnaires to assess patient satisfaction. In fact, the Ministry of Health questionnaire applies to patients who come to the hospital for medical examination and treatment, so it is not appropriate to apply the survey at the polyclinics.

Purpose: The study aims to develop a set of assessment tools for patients' satisfaction when visiting and treating at polyclinics.

Methodology: Cross-sectional study conducted over 300 outpatients at the satellite polyclinic in Binh Chieu ward from March to May 3, 2019. Data collection data by Epidata 3.1, analyzed by STATA14.0.

Results: The final set of tools includes 39 subsections / questions divided into 7 elements. The results show that these 7 factors explain 76.53% variation of data. The regression model shows that the overall satisfaction variable is statistically significant with the remaining 7 factors, meaning that 100% variation of the variance of general satisfaction is explained by 7 factors that constitute the scale.

Conclusion: The analytical results show that the statistical indicators reflect the validity and reliability of the toolkit all according to the

recommendations of the literature. The use of questionnaires in practice is convenient and feasible for patients to visit and treat at the polyclinic.

Keywords: value, reliability, satellite clinic, Binh Chieu

P76.

Intimate partner violence among pregnant women: A birth cohort study for evidence based health literacy promotion in Vietnam

Vo Van Thang 1,2; Michael Dunne 1,3, Nguyen Hoang Lan 1,2, Hoang Dinh Tuyen 1,2, Luong Thanh Bao Yen 1,2

1. Institute of Community Health Research, Hue University of Medicine and Pharmacy, Vietnam

2. Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam

3. Queensland University of Technology, Brisbane, Australia

Background: Around 1 billion children worldwide experience some form of interpersonal violence. Exposure to violence is an important risk factor, even before the child is born, showed having adverse effects on health and well-being not only in childhood but also throughout the lifespan. Furthermore, many women experiences of physical, emotional and sexual violence during pregnancy, and the effects on mother's health and long-term child development can be severe. A systematic review conducted in 2019 found that Prenatal Intimate partner violence (p-IPV) in Vietnam ranged from 5.9% to 32.5%, depending on the forms reported (Do et al., 2018). Murray et al. (2015) found that 6.4% of mothers at six months of postpartum had experienced violence in the past year. Vo et al (2017) found some associated factors with postpartum depressive symptoms included reliance on the husband, not being able to discuss problems with their husbands and ill baby. Our present EBL (Evidence for Better Lives Study) in Vietnam as a part of the foundational global birth cohort study among eight medium-sized cities from low- and middle-income countries, was aimed at producing high-quality evidence from local under-represented, culturally diverse settings to estimate of impact of p-IPV on adversity of birth outcomes in terms of maternal health and newborn babies.

Method: It's a short birth cohort study in a sample of 148 pregnant women living in Hue city. Data were collected during the last trimester of pregnancy and 2-5 months after birth, on individual and contextual risk and protective factors by modified instruments. IPV was firstly determined if the pregnant women had at least one form of IPV exposed during the first 6 months of pregnancy. Depression of women after delivery was analysed using Patient Health Questionnaire-9 (PHQ-9). Risk ratio (RR) was calculated to show predictor of exposure to p-IPV and delivery outcomes as mother depression and newborn baby health.

Results: The average age of 148 pregnant women was 29.91 ± 5.01. 14.2% of women experienced p-IPV. By the forms of violence, 13.5% were Emotional, 2.0% were Physical, and 1.4% were Sexual respectively. The mode of delivery was 48.6% pregnant women had caesarean section and 14.9% of newborn babies suffered from health problem. Data also described the prevalence of mild and moderate depression after delivery was 20.9%. Women experienced at least one form of p-IPV in the first 6 months of pregnancy was significantly increased the risk in mild and moderate depression after delivery (RR = 2.10; 95% CI: 1.09 – 4.07). However, the study did not find p-IPV as risk factor of health status of newborn babies.

Discussion: This pilot study showed that p-IPV in the first 6 months of pregnancy was a risk factor for mild and moderate depression in postpartum women. However, pregnant women had been selected using a non-probabilistic sampling strategy with a small sample size, therefore, generalisation to the broader underlying population was still limited in discovering a comprehensive picture of p-IPV as risk factor of health status of newborn babies. But study also provided important evidences for a further study to put into urgent action of health literacy promotion in effective prevention of violence against children and pregnant women in Asia.

Keywords: EBLS, birth-cohort study, violence against children and pregnant women, health literacy

P77.

Functional status and related factors among the elderly in the central province, Vietnam: a further consideration of health literacy for healthy aging

Vo Nu Hong Duc 2, Ngo Thi Dieu Huong 2, Truong Quy Quoc Bao 1, Doan Vuong Diem Khanh 1,2, Vo Van Thang 1,2

1. Institute for Community Health Research, Hue University of Medicine and Pharmacy, Hue University
2. Faculty of Public Health, Hue University of Medicine and Pharmacy, Hue University.

Background: The increase in the number of elderly people determines the need of improving better the quality of life of this aging population, as a comprehensive policy for the currently stable development in Vietnam. The aging process leads to the decline of functional status of the elderly often affected simultaneously by biological, psychological and socio-economic factors. The increase in the number of elderly people determines the need of improving better the quality of life of this aging population, as a comprehensive policy for the currently stable development in Vietnam. This study aims to describe the functional status and its related factors of the elderly (aged 60 years and above) in some communes of Phu Vang district and Hue city in Thua Thien Hue province, Vietnam.

Methods: A cross sectional study design was applied, using the Lawton Instrumental Activities of Daily Living (IADL) scale and Activities of Daily Living (ADL) scale to interview 728 subjects.

Results: 43.3% of respondents were less able to perform all activities: using telephone, shopping, cooking, housekeeping, doing laundry, using modes of transportation, using medications and managing finances; The majority of older people do not need of support for each specific ADL item; 17.4% of respondents were dependent of doing all ADL items: feeding, bathing, grooming, dressing, bowel control, bladder control, bowel control, toilet use, transfers, mobility on level surfaces. Among ADL items and IADL items, the most commonly dependent activities were climbing stairs (8.4%) and shopping (30.9%), respectively. The elderly mainly had difficulty in visual and memorizing functions. Functional status decreases with age, women have a higher risk of functional decline than men. The factors of marital status, religion, degree of fear of falling, cognitive decline are related to the functional health of the elderly.

Conclusion: Functional declination of daily activities among the elderly is very common and they are in need of receiving thorough care and support from families and society and improve their aging health literacy for better quality of life.

Key words: the elderly; functional status; Instrumental Activities of Daily Living (IADL); Activities of Daily Living (ADL); Health literacy

P78.

Cyber-bullying among young adolescent: evidence from school-based survey in Central Vietnam to address health literacy in violence prevention at schools

Hoang Thuy Linh Nguyen 1,2, Keiko Nakamura 1, Kaoruko Seino 1, Van Thang Vo 2,3

1. Department of Global Health Entrepreneurship, Division of Public Health, Graduate School of Tokyo Medical and Dental University, Japan.
2. Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam.
3. Institute for Community Health Research, Hue University of Medicine and Pharmacy, Vietnam

Background: Rapid and widespread development of social networking sites creates a venue for increase in cyberbullying among adolescents, with consequences leading to severe mental health problems. Research on cyberbullying in Vietnam is still in the early stage. The study to examine the prevalence of cyber-bullying and its associated factors.

Methods: Data were obtained from a school-based survey performed in Hue City, Vietnam, in 2018, among randomly selected grade 6 students (11 years old). A total of 648 students were interviewed face-to-face using a structured questionnaire. Cyber-bullying scale was employed to assess the level of experience as a victim of cyberbullying in the previous 30 days, which original scale developed by Patchin and Hinduja in the USA. All analyses were performed at 95% confidence level.

Results: The prevalence of cyber-bullying among young adolescents was 9.0%, in particularly, being called mean name or teased in hurtful way is common form. There were no significant differences in gender distribution, perceived of academic pressure, family living situation, using Internet devices ($P>0.05$) according to cyber-bullying situation. School-bullying, unhealthy behavior remained significant predictors of experience of cyber-bullying victimization with the addition of potential confounding factors into the univariate model, such as: gender, perceived of academic pressure, using Internet devices, unhealthy behavior, family living situation; also the source of accessing Internet (aOR =3.31, 95%CI, 1.79, 6.15; aOR =6.83, 95%CI, 2.49, 18.69, respectively).

Conclusion: Apart from the traditional bullying form, it is pertinent to note that the increasing acts of cyberbullying are happening and need to be addressed in health literacy promotion in all stakeholders. This finding also supports the association between school-bullying, unhealthy behavior and experience victimization of cyber-bullying. The developing countries need to immediately pay more attention to the young and offer them more support.

Keywords: cyber-bullying, young adolescent, Vietnam. health literacy

P79.

E-health literacy of medical students at a university in central Vietnam

Le Thi Bich Thuy, Nguyen Hoang Lan

Faculty of Public Health, Hue University of Medicine and Pharmacy, Hue University, Hue, Vietnam.

Background: In the digital era, eHealth is an important prerequisite for promoting healthy behavior. Medical students who will be health care service provider need to have appropriate skills to effectively use the sources of health information for their learning and decision-making.

Objective: The study is to measure eHealth literacy of medical students at a university in central Vietnam and to examine factors influencing their skills.

Material and methods: This is a cross-sectional study. Data were collected through the self-administered structured questionnaire of 410 students who were randomly selected among general medical students and preventive medicine students in the fifth year at Hue University. The eHealth literacy scale was developed on the basis of eHEALS to measure skills for seeking and utilizing sources of eHealth information. Multiple linear regression model was used to identify factors influencing their eHealth literacy.

Results: The study found that the general mean score for eHealth literacy among participants is 27.03 (SD = 3.54). Factors influencing eHealth literacy are genders ($p=0.001$), training program ($p=0.013$), computer skills ($p=0.031$) and purpose of seeking and using medical information ($p<0.001$).

Conclusions: The findings showed that eHealth literacy of medical students in the study setting is still limited. In order to improve these skills of students, the educators should have relevant teaching strategies that promote the interest and skills of students to locate and evaluate eHealth resources.

Key words: eHealth literacy, health resource, medical students, Vietnam.

P80.

Effects of extreme temperature on hospital admissions for acute myocardial infarction in Thua Thien Hue province of central Vietnam: a big concern of health literacy promotion

Thi Anh Thu Dang 1,2, Darren Wraith 3, Michael P. Dunnea 3.

1. Institute for Community Health Research, Hue University, Hue City, Vietnam.
2. Department of Environmental and Occupational Health, Public Health Faculty, Hue University of Medicine and Pharmacy, Hue City, Vietnam.
3. School of Public Health and Social Work, Queensland University of Technology, Brisbane, Queensland, Australia.

Background: Vietnam is one of the countries most affected by climate change, especially the North-central area where suffered highest ambient temperature variation. However, no study has focused on the population health effects of climate variation in this region. Extreme temperature might exacerbate underlying chronic conditions and precipitate hospitalization or early death. This research examined the short-term effects of ambient temperature on hospital admissions (HAs) due to acute myocardial infarction (AMI) in Thua Thien Hue, a province in the Central Coast region of Vietnam.

Methods: Information from medical records of all 1274 cases of AMI HAs (with hospital records cross-checked by clinicians) was collected from the Hue Central Hospital, the highest-level hospital of the province, for the period 2008 - 2015. Meteorological data were obtained from the National Hydro-Meteorological and Environment Network Centre. We used distributed lag non-linear models to assess the association between daily average temperature and AMI HAs, accounting for long-term trend and other meteorological variables.

Results: We found a negative and significant association between AMI HAs and temperature in the Thua Thien Hue. The risk of AMI HAs increased by 10% (Relative risk (RR): 1.10, 95% CI: 0.99 – 1.23, $p > 0.05$) at moderately low temperatures (10th percentile of temperature range – 19.0oC) and increased by 30% (RR: 1.30, 95% CI: 1.01 – 1.67, $p < 0.05$) at extremely low temperatures (5th percentile of temperature range – 17.3oC). This result was relatively against with the trend observed in Khanh Hoa, a province in the South-Central region of Vietnam, where AMI HAs rate was found positive and significant associated with the increase of ambient temperature.

Conclusions: Risk of AMI is associated with extremely low temperature in Thua Thien Hue province. The study supports the findings that AMI risk varies in relation to the local regional climate in Vietnam. Public health preparedness and multi-level interventions with a good integration of health literacy promotion should attempt to reduce people's exposure in periods of extreme low temperatures in Thua Thien Hue province.

Keywords: Ambient temperature, acute myocardial infarction, distributed lag non-linear model, tropical climate, developing country, health literacy

P81.

Maternal health care service utilization among ethnic minority women in Central of Vietnam

Duong Le Dinh 1,2, Thang Vo Van 1,2

1. Faculty of Public Health, College of Medicine and Pharmacy, Hue University
2. Institute for Community Health Research, College of Medicine and Pharmacy, Hue University

Background: Despite of the achievements in progress of maternal health in Vietnam, the gap of utilization health services between vulnerable populations are more obviously particularly in remotes area and ethnic women. The aim of this study is to determine maternal health care services (MHCS) utilization and its related factors among ethnic minority women in a remote area, central Vietnam.

Methods: A cross-sectional study design was conducted in a mountainous district of Central Vietnam. All 385 ethnic minority women who delivered a baby in the twelve months preceding the survey were invited to participate, and 381 were interviewed in their households with a structured questionnaire. Multiple logistic regression model analysis was used to define the significant factors related to having at least one antenatal care (ANC) visits per trimester, which is the study criterion for adequate antenatal care, versus fewer. **Results:** About four-fifth (78.2%) of the women met the criterion during their previous pregnancy, while 3.1% reported not making any antenatal care visits. Older women were more likely to report adequate ANC visits than younger group (20 years old), (20-24: aOR = 3.59; 95% CI: 1.41 - 9.09; 25-29 group: aOR= 5.58; 95% CI: 2.04 - 15.23) and ≥ 30 groups: aOR= 2.66 95% CI: 1.21 - 5.84). In addition, women with higher education (secondary or above) and good knowledge of maternal health care services are found more likely to report having adequate ANC than others; OR = 2.50; 95% CI: 1.39 – 4.50 and aOR= 5.48; 95% CI:3.00 - 9.90 respectively. Regarding to the support from their family in the last pregnancy, women who received high support and middle support from their family were higher risk with adequate ANC compared to none-family supports, aOR =4.28; 95% CI: 1.82– 10.06, aOR=2.28 95% CI 1.16 – 4.50 in respectively.

Conclusion: One in five minority women were not access to basic maternal health care services in their previous delivery. There were statistically significant association between age; education, maternal health knowledge and family supports and accessibility of local antenatal care service. Therefore, reproductive health care system needs to continue to support the maternal health literacy and more feasible intervention should focus on adequate accessibility to health service at vulnerable groups in their locally specific culture.

Keywords: antenatal care, maternal health, women, ethnic minority and utilization, health literacy

P82.

Epidemiology of venomous snakebites and knowledge, attitude and practices of first-aid for snakebites in the central province, Vietnam

Bui Thi Phuong Anh 1, Vo Van Thang 1, Nguyen Hoang Lan 1, Joerg Blessmann 2

1. Faculty of Public Health, Hue UMP
2. Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

Introduction: Snakebite is a serious and important problem especially in rural areas of tropical and subtropical developing countries, having been considered by WHO as a tropical disease in 2017. Poor health literacy as well as limited perception and knowledge of venomous snakes and first aid after snakebites may lead to disability and even death. Some snakebite victims still rely on natural or traditional methods of treatment without considering professional medical care. The aim is to describe the epidemiology of snakebites and assess the knowledge, attitude and practice (KAP) and associated factors regarding snakebite first- aid in ThuaThien Hue province, Vietnam.

Methods: Three cross-sectional community based surveys were carried out in Thua Thien Hue province from March to July 2017 in order to estimate the annual incidence of snakebites in the mountainous, coastal and urban region of the province and to measure incidence for the entire province. In addition, a pre-designed questionnaire was used for assessing the knowledge, attitude and practice of first aid for snakebites. A total number of 400 participants were randomly selected and interviewed in this study.

Results: 20, 10 and 01 interviewees reported as victims of snakebites in 2016 in the mountainous, coastal and urban region respectively. The annual incidence was 172 (95%-CI: 105–266), 69 (95%-CI: 33–126) and 10 (95%-CI: 1–56) snakebites per 100,000 person-years, respectively. The incidence of snakebites over this province was accounted for 58 (95%-CI: 17–199) per 100,000 person-years.

Only 31% of the participants correctly identified medically relevant venomous snake species of the region. Harmful first aid like application of tourniquets, squeezing and sucking blood from the wound and pricking or cutting the bite site was considered appropriate first aid by 50%, 23% and 17% respectively. Only 6% immobilization was a first aid technique for venomous bites as appropriate first aid. Attitude was considered appropriate in 81% of participants, but the correct knowledge and practise of participants were low with 36% and 8% respectively. There was statistically significant association between knowledge and factors of gender and occupation. There was statistically significant association between attitude and factors of educational level and residence of participants. Factors of ethnicity and residence of participants also significantly associated to the practices ($p < 0.05$).

Conclusions: The high rate of venomous snakebites cases of the study area still needs to pay more attention. Meanwhile, knowledge of community members about medically relevant snakes of the region and first aid after snakebite is insufficient. There is an urgent need to improve health literacy in the community for this important health problem, especially to integrate teaching this topic in schools at all levels in the country.

Key words: health literacy, snakebites, knowledge, attitude, practice, first aid

P83.

The situation of using safe motherhood services of the mothers with children under 1 year old in a rural district, Vietnam

Ngo Viet Loc 1, Pham Thi Nhat Giang 1, Nguyen Thi Thuy Hang 1, Truong Nhu Son 2

1. Hue University of Medicine and Pharmacy.
2. Phu Vang District Medical Center

Background: Safe motherhood is that all women are received necessary cares to be completely healthy during pregnancy, childbirth and postnatal, including emergency obstetric treatment when there are complications. In Vietnam, there are 600 maternal deaths, more than 10,000 infant deaths and 100 children under 5 years old die each year, mainly due to the problem of approaching and using safe motherhood services of mothers with many limitations. The objectives of this study was too describe the situation of using safe motherhood services and to find some factors related to the situation of using safe motherhood services of mothers with children under 1 year old in Phu Vang District, Thua Thien Hue Province, Vietnam in 2018.

Methodology: A cross-sectional descriptive study on 320 mothers with children under 1 year old in 8 communes/towns in Phu Vang District, Thua Thien Hue Province from July 1st 2018 to April 30th 2019. We conducted a questionnaire and collected data by directly interviewing subjects with that questionnaire. Using EPIDATA version 3.1 and SPSS version 20.0 to enter and analyse data.

Results: The situation of using prenatal care services was 87.8%, birth care services (97.8%), postnatal care services (58.1%). The significant relationships with the situation of using prenatal care services were occupation (OR = 11.05; 95%CI: 3.65 – 16.62; p -value <0.01), prenatal knowledge (OR = 16.78; 95%CI: 7.70 – 36.56; p -value <0.01). The significant relationships with the situation of using birth care services were number of children (OR = 9.92; 95%CI: 1.88 – 52.33; p -value <0.01), age of marriage (OR = 6.86; 95%CI: 3.54 – 8.35; p -value <0.01) and birth knowledge (OR = 23.4; 95%CI: 19.81 – 27.06; $p < 0.01$). The significant relationships with the situation of using postnatal care services were age (OR = 5.98; 95%CI: 6.53 – 12.44; p -value <0.01), occupation (OR = 9.55; 95%CI: 6.53 – 18.69; p -value <0.01); education level (OR = 15.77; 95%CI: 8.25 – 19.45; p -value <0.01); age of marriage (OR = 9.18; 95%CI: 16.88 – 19.49; p -value <0.01) and postnatal knowledge (OR = 1.95; 95%CI: 1.23 – 3.07; p -value <0.01).

Conclusions: A systematic overview of safe motherhood programs in a country can help to set priorities of maternal health literacy improvement, in decision making for the allocation of resources towards contextually relevant strategies to curtail maternal mortality and severe morbidity. Planning for program design and evaluation may also be aided by such a process. Based on some factors related

to the using of safe motherhood services to take appropriate measures.

Keywords: Safe motherhood, children under 1 year old, health literacy

P84.

Applied the prototype of artificial intelligence on holistic weight management– the influence of health literacy on obesity.

Ru-Yi Huang^{1,2,4}, Tara Tai-Wen Chen^{2,4}, Yi-Chen Lee³, Chi-Wei Lin^{2,4}
1. Department of Hoslistic Medicine, E-Da Hospital 2. Department of Family and Community Medicine, E-Da Hospital. 3. Department of Nutrition, E-Da Hospital. 4. School of Medicine, College of Medicine, I-Shou University

Health literacy is a growing concern in public health, prevalent in human behavior of engaging in self-care and chronic disease management. It is defined by the U.S. Department of Health and Human Services (HHS) as “the degree to which individuals have the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions.” Although there have been many interventions to improve health literacy levels, there is a gap for understanding the influence of artificial intelligence towards decision-making. This study investigates the use of voice interactive inquiry survey (VAIS) method from artificial intelligence robots for obesity management. Obesity is a forefront epidemic that needs to be controlled at the individual level. The VAIS method has been successful for assessing diseases and the general health condition in patients. The AI robot is able to use its assessment to search for the best modality of personalized weight management and provide an individualized treatment plan which includes a series of health literate communication and education messages on home-care obesity management. Patients will be given a choice to follow the AI robot’s treatment plan. The VAIS method will store the patients’ ideas, feelings, and expectations of the choices given for the treatment plan to explore how the patients’ level of health literacy would affect the mutual decision on the obesity management. Health literacy levels for obesity will be measured with the Weight-Specific-Health-Literacy Instrument (Taiwan), and the logistic regression model adjusting for age and gender will be applied. The study was funded by the Health Promotion Administration, and passed the EDAH IRB approval.

P85.

Quality of life and associated factors among the elderly in a city Vietnam

Nguyen Thi Hong Nhi 1, Doan Vuong Diem Khanh 3

1. Health Management Training Institute,
2. Faculty of Public Health, Hue University of Medicine and Pharmacy, Vietnam.

Background: The aging process is increasing rapidly in developing countries, including Vietnam. According to the forecasts of the United Nations, in Vietnam, the proportion of the elderly will rise up to 22% in 2050. By 2045-2050, life expectancy will increase to 83 years old in developed countries and 74 years in developing countries. Although Vietnam's average life expectancy is higher than many other countries with the same income, the quality of the population is still low.

Objectives: To describe the quality of life (QoL) among the elderly in Huong So Ward, Hue city, Thua Thien Hue province in 2018, and to examine some factors associated with QoL among participants.

Methods: This cross-sectional study was conducted among 422 people aged 60 years and above in Huong So ward, Hue city, Thua Thien Hue province. The study used SF-36 scale to measure quality of life including functional activities, functional limitations, pain perception, health assessment, sense of vitality, social activities, psychological limits and mental evaluation. (Good QoL if score >50, poor QoL if score ≤50). Multiple logistic regression model was undertaken to examine factors associated with QOL.

Results: The average score of the quality of life in functional activities (68.5 points) was the highest, the lowest one was the quality of life score in the field of health assessment (32.5 points). 36.5% of participants had poor QOL. Mean score for the quality of life was 56.8. Factors significantly associated with QoL included age (AOR of 60-69 aged group: 18.5; 95%CI: 2.0 -14.2; p-value < 0.001; AOR of 70-79 aged group: 5.4; 95%CI : 6.3-34.1; p-value< 0.001), household economics (AOR: 3.3; 95%CI: 1.3-7.5; p-value<0.05), marital status (AOR: 2.1; 95%CI: 1.2-4.1; p-value< 0.05), chronic disease (AOR: 6.1 ; 95%CI: 2.9-13.2 ; p-value<0.01), interested in understanding issues related to health (AOR: 2.0; 95%CI: 1.3-3.2; p-value<0.05), exercise habit (AOR: 1.9; 95%CI: 1.4-3.8; p-value< 0.05), drinking coffee (AOR: 4.9 ; 95%CI: 1.9-12.7; p-value< 0.01), and social relationships (AOR: 3.8 ; 95%CI: 1.8-8.4; p-value< 0.01).

Conclusion: Poor quality of life was common among the elderly, therefore we should enhance more intervention activities to improve health literacy and the QoL for the elderly in this population.

Keywords: Quality of life, the elderly, health literacy

P86.

Assessing nutritional status of the elderly in a rural district, Vietnam: Health literacy for healthy aging

Tran Thi Tao, Phan Thi Bich Ngoc

Faculty of Public Health, Hue College of Medicine and Pharmacy

Background: Nowadays, the number of the elderly is increasing both in developing countries and in VietNam. Chronic energy deficiency is a popular status in the elderly, which result in the risks of diseases and death increase. The early and precise diagnosis of malnutrition is essential in order to initiate nutritional therapy as soon as possible. In elderly people “without overt disease”, low-degree malnutrition is often overlooked and no therapy.

Objectives: 1. To assess the nutritional status of the elderly in Quang Dien district, Thua Thien Hue province by the anthropometric method and Mini Nutritional Assessment – MNA questionnaire 2. Finding out some factors related to the elderly’s nutritional status.

Methodology: A cross-sectional study was conducted on 650 people aged above 60 in 5 communes, belonging to Quang Dien district. The anthropometry method was used to collect height, weight, mid-arm circumference, and calf circumference. The MNA questionnaire was used for determining the elderly, who were at risk of malnutrition and the other questionnaire to find out some factors associated with the elderly’s nutritional status.

Result: BMI classified that the proportion of chronic energy deficiency in the elderly (CED) was 26.8%, in which the prevalence of class I CED, class II CED, class III CED were 17.5%; 6.8%; 2.5% respectively. According to MNA, the percentage of malnutrition was 8.2% and 53.2% at risk of malnutrition. The figure in females was higher than males’. The research found that the trend of the risk of malnutrition and malnutrition were rising by age. The research also found that

some factors related to nutrition status, involving finance, number of the main meal, primary people take care of, dental health problems. Conclusion: Malnutrition in the elderly is an issue that must be considerably concerned in health literacy promotion in Asia. The most important is the elderly, who are at risk malnutrition must be detected as soon as possible in order to intervene immediately. There were significantly associated with nutrition status by age, gender, finance, number of the main meal, primary people take care of, dental health problems.

Keywords: malnutrition, risk of malnutrition, the elderly, BMI, MNA, health literacy

P87.

Chronic disease status and the demand for care among the elderly in a city, central Vietnam

Nguyen Thi Bao Ai 1, Le Vu Ha Vy 2, Nguyen Thi Mien Ha 3, Le Thi Thanh Thuy 3, Vo Van Thang 3

1. Quy Nhon Medical center of Binh Dinh province
2. Control Disease center of Quang Ngai province
3. Faculty of Public Health, Hue University of Medicine and Pharmacy

Background: Chronic diseases were the main factor of disability and decreased quality of life, which cause effects requiring long-term care, especially for the elderly. Besides, the elderly in Vietnam have a high rate of chronic disease. This really becomes an arising challenge to health care for the elderly in Vietnam. The Objectives of this study were to describe self-reported chronic disease status among the elderly in Thuy Bieu Ward, Hue city in 2017 and to assess the demand for care of chronic disease and associated factors among the elderly in Thuy Bieu Ward, Hue city in 2017.

Methodology: A cross-sectional study design was conducted on a total number of 421 elderly samples in Thuy Bieu Ward, Hue city. The data of study was collected by using structured questionnaires and face-to-face interviews. Epidata 3.1 was used for data entries and all of the analysis was conducted using SPSS version 16.0. Descriptive statistics and multiple logistic regression were utilized to analyse the association between the demand for care of chronic disease and other independent factors.

Results: Of 421 participants, 57.5% of the elderly had at least one chronic disease; one elderly person acquired 0.83 chronic disease in average; some common chronic diseases were hypertension, osteoarthritis, diabetes, coronary artery diseases; 22.3% of the elderly people had high demand for comprehensive care of chronic diseases. Family condition (OR=2.99; 95%CI: 1.03 – 8.6, p=0.044), health insurance coverage (OR=8.98; 95%CI: 1.88 – 42.89, p=0.006) and self-reported chronic diseases (OR=4.44; 95%CI: 2.47 – 7.98, p<0.001) had statistically significant relationship with the demand for care among elderly.

Conclusions: The elderly people have a high rate of chronic diseases and quite high demand for health care. So that it's very important to develop evidence based policies for meeting demand of comprehensive care in the elderly; especially paying more attention to the elderly people are vulnerable to loneliness and social isolation in the community.

Keywords: the elderly, chronic diseases, demand for care.

P88.

Quality of life of chronic patients with end-stage renal disease undergoing cycling haemodialysis at Quang Ngai provincial general hospital

Nguyen Thi Minh Hien¹, Doan Vuong Diem Khanh², Dang Cao Khoa²

1: Quang Ngai provincial General Hospital

2: Faculty of Public Health, Hue University of Medicine and Pharmacy

Background: The development and improvement of kidney replacement therapy has significantly improved the survival rate of chronic patients with end-stage renal disease, but the mortality rate of these patients is still high, estimated survival rate of these patients after 1 year is 79.6%, after 2 years 66%, after 5 years 34.4%, after 10 years 10.5%. Treatment of chronic patients with end-stage renal disease is still difficult and expensive. Quality of life of these patients is low. Objectives: To assess the quality of life among chronic patients with end-stage renal disease treated with cycling haemodialysis at Quang Ngai Provincial General Hospital and to find out factors related to quality of life of the research objects. Methods: A cross-sectional descriptive study conducted in 160 patients with end-stage renal disease treated with cycling haemodialysis at Quang Ngai Provincial General Hospital from June 2018 to May 2019. Quality of life was measured by using the KDQOL-SF scale which has 24 questions covering 19 domains containing 43 items related to kidney disease and 36 items covering general health. Results: The prevalence of patients with end-stage renal disease treated with cycling haemodialysis having good quality of life was 46.9%. The average score of quality of life by components: Features of kidney disease: 50.77 (SD=12.94); Physical health: 39.87 (SD=24.14); Mental health: 52.82 (SD= 21.97); Quality of life based on the general total score: 48.24 (SD=15.68). Relative to patient group aged 60 and older, the odds of having good quality of life was 2.4 times higher among the group under 60 year-old. Relative to the primary or lower education group, the odds of having good quality of life were 2.3 and 1.5 times higher among those who had secondary school and high school education levels, respectively. Conclusions: Poor quality of life was common among chronic patients with end-stage renal disease treated with cycling haemodialysis, therefore we should enhance more intervention activities to improve the QOL for this population. Keywords: Quality of life, chronic patients with end-stage renal disease, cycling haemodialysis.

P89.

Women with physical disabilities in Northern Vietnam: Breastfeeding challenges and adaptation

Thi Vinh Nguyen, Julie King, Niki Edwards, Michael Dunne

Address: Room B628, O Block, B wing, QUT Kelvin Grove Campus, 149 Victoria Park Road, Kelvin Grove, QLD 4059.

Background: Breastfeeding are consistently reported as beneficial to mothers and babies. There is a dearth of research around the experiences of breastfeeding for women with physical disabilities (WWPD) in low-and middle-income countries where 80% of people with disabilities live. Aims: To explore WWPD's challenges and adaptation in breastfeeding. Methods: In-depth interviews were conducted with WWPD who had given birth in the past three years in Hanoi and Thabinh, Vietnam. Twenty-nine women participated in a first interview and 27 women participated in a follow-up interview. A thematic approach was used for data analysis with the support of NVivo software. Results: Late breastfeeding initiation was common

due to mothers and babies were routinely separated for several hours immediately after birth. During the separation, babies were given the first feeding with formula milk. When babies returned to their mothers, a quarter of the women delayed the initiation of breastfeeding until their milk came in. The majority of WWPD combined breastfeeding with feeding babies with formula milk rather than giving exclusively breastfed for the first six months. Many disability-related challenges were reported as barriers for breastfeeding, including positions for latching and the pain and discomfort they suffered when giving breastfed. Some women adapted to these by putting their baby on stack of pillows close to them while breastfeeding, and one woman placed her baby on a wood plank that were put over two wheelchair armrests to give breastfed. Conclusion: The current routine of mother-baby separation after birth delayed the initiation of breastfeeding, and then impacted exclusive breastfeeding during first months of WWPD. The women faced many difficulties in giving breastfed due to their disabling condition. Although some adaptive strategies were applied, the women needed more support to facilitate breastfeeding. Keyword: disabilities, breastfeeding, challenges, adaptation, Vietnam.

P91

Hospital quality and results of evidence based intervention model in Can Tho city

Cao Minh Chu¹, Nguyen Hai Dang² Vo Van Thang³,

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

² Health Department of Can Tho City, Vietnam

³ Faculty of Public Health, Hue University of Medicine and Pharmacy

Introduction: Hospital quality was assessed through a set of hospital quality criteria set by the Ministry of Health under decision No. 4858/QĐ-BYT on December 3, 2013 and amended and supplemented in decision No. 6858/QĐ-BYT on November 18, 2016. Therefore, from the situation of hospital quality was used as scientific evidence in the 1st phase, we applied this set of national criteria from the point of

view “Patient - Centered Health Care” to improve better hospital quality in Can Tho city for the 3rd phase. Methods: There were 6 general hospitals of district (resources, facilities, human resources, records, data, professional organization, hospital environment, improvement activities, science and technology and hospital performance,..) and service users at these 6 general hospitals of district. The study designs were used for 3 phases such as a analytic cross-sectional descriptive research (phase 1), qualitative research (phase 2) and intervention study design was compared with the control group (phase 3). Applying evidence based quality improvement tools such as 5S, Sig Sixma and Lean to the work of each department, specific room in 2 intervention hospitals and building an intervention model including the following solution groups: (1) patient centered solution; (2) human resource development; (3) financial security and (4) applied information technology. Results: After 2 years of intervention (2017-2018), general hospital of Thot Not district had an average hospital quality score from 3.19 points to 3.61 points after intervention with $p < 0.001$ and health center of Thoi Lai district got an average hospital quality score from 2.81 points increased to 3.57 points after intervention with $p < 0.001$. The satisfaction rate of health workers after intervention increased from 71.84% to 76.11% in the control group and 60.54% to 88.76% of the intervention group with $p < 0.001$. The satisfaction rate of inpatients after intervention increased from 69.43% to 79.25% in the control group, from 64.40% to 92.00% of the intervention group with $p < 0.001$ and effectiveness of intervention cards were 28.27%. Outpatient satisfaction rate after intervention increased from 56.03% to 72.73% in the control group, from 65.81% to 98.36% of the intervention group with $p < 0.001$ and effectiveness of intervention cards were 19.65%. Conclusion: Applying quality improvement tools such as 5S, Sig Sixma and Lean to improve the quality of hospitals with the focus of “Patient - Centered Health Care”, contributing to improving the quality of hospitals, as well as improving the behavior of a physician for the people of the health sector and driving hospitals to a new level of quality. Keywords: Hospital quality, Lean, Sig Sixma, 5S in hospitals, evidence based intervention

Contents

Floor plan	3
General Information	4
Glance Program	5
Full Program	6
PRE-CONFERENCE DAY: 10th November 2019 (SUNDAY)	6
CONFERENCE-DAY 1: 11th November 2019 (MONDAY)	6
CONFERENCE-DAY 2: 12th November 2019 (TUESDAY)	11
Poster Session	13
KEYNOTE SPEAKER	16
ABSTRACT CONFERENCE	23

2019 SPONSORS & SUPPORTERS

DIAMOND SPONSORSHIP



Boehringer
Ingelheim



Abbott



義大醫療財團法人
E-DA HEALTHCARE GROUP

GOLD SPONSORSHIP



DKSH



SILVER SPONSORSHIP



SANDOZ A Novartis
Division



BRONZE SPONSORSHIP



AstraZeneca



CO-SPONSORSHIP



airiti Library 華藝線上圖書館



Chung Shan Medical University



THU DUC DISTRICT HOSPITAL

29 Phu Chau, Tam Phu ward, Thu Duc district, HCMC, Vietnam



www.benhvienthuduc.vn | <https://www.facebook.com/benhvienquanthuduc>