

# Proceedings of the 2017 Asian American/ Pacific Islander Nurses Association Conference: East Meets West in Global Health Nursing Research, Practice, and Leadership

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## Editor's Message

We are pleased to present the list of abstracts presented at the Annual Meeting of the Asian Pacific Islander Nursing Association held this year in March. We had a banner year with 167 attendees and over 100 abstracts submitted for oral and poster presentations. The focus was on Global Health and seven countries were represented. These include the United States, Thailand, Korea, Guam, Okinawa, Japan, and India. The presentations were dedicated to nursing research, practice, and education. Topics ranged from health disparities, palliative and end of life care, the workplace, disaster planning, safety, technology, and various health issues such as cardiovascular, diabetes, child and family health, pregnancy, women's health. You will find these topics interesting and informative.

A Pre-Conference Okura Foundation Meeting was held with three new Okura fellows appointed. In addition, there were two exciting tours; one to UH SON Simulation Lab and the other a walking tour of tropical plants which linked nicely to a session on Safety in Pharmacotherapeutics.

Several awards were presented at the conference and we would like to congratulate all who received them as listed below:

### **2017 AAPINA Research Grant Award**

Hyunhwa Lee, PhD, APRN, PMHNP-BC; University of Nevada, Las Vegas (School of Nursing)

### **2017 AAPINA Geropsychiatric Research Grant Award**

Reimund Serafica, PhD, MSN, RN; University of Nevada, Las Vegas (School of Nursing)

### **2017 AAPINA Scholarship Award**

Letha Joseph, MSN, RN, AGPCNP; University of North Carolina, Chapel Hill (School of Nursing, DNP student)

## **2017 Okura Fellows**

Alona D. Angosta, PhD, MSN, APRN, FNP, NP-C; University of Nevada, Las Vegas (School of Nursing)  
Minjeong Kim, PhD, RN; San Diego Stated University (School of Nursing)

Reimund Serafica, PhD, MSN, RN; University of Nevada, Las Vegas (School of Nursing)

## **2017 Okura Mentors**

Marife C. Aczon-Armstrong, PhD, MSN, MSCP, BSN, RN-BC; Arizona College, Las Vegas Campus (School of Nursing)

Heeyoung Lee, PhD, PMHNP-BC, CRNP; University of Pittsburgh (School of Nursing)

Hyunhwa Lee, PhD, APRN, PMHNP-BC; University of Nevada, Las Vegas (School of Nursing)

We would like to thank Drs. Merle Kataoka-Yahiro (Conference chair) and Alona Angosta (Program chair) for their work on making the conference a success as well as the planning committee members and the entire Executive Board of AAPINA, Drs. Pat Alpert (President), Alonal Angosta (President Elect), Mahealani (Secretary), Jennifer Kawi (Treasurer) and especially Ms. Kirsten Connelly for her production management and editorial assistance without whom the work of the editors would have been impossible.

Finally, I'd like to announce a special issue planned for later this year on the topic of Global Health which will draw from many of these presentations. The due date for submissions is September 1, 2017, and we hope to have many of the presenters, both podium and poster, submit their manuscripts.

Jillian Inouye, PhD, APRN, FAAN  
*Editor*

Saturday, March 25, 2017

## Oral Presentations

Saturday, March 25, 2017 (9:55 a.m. – 3:15 p.m.)

### Abstract 1

*Acculturation Characteristics Associated with Chronic Diseases and Health Behaviors Among Filipino Americans in California*

**Maria Lourdes Bayog, PhD, RN, CNS, PHN<sup>1</sup>, Catherine M. Waters, RN, PhD, FAAN<sup>1</sup>, Felicitas dela Cruz, RN, DNSc, FAANP<sup>2</sup>, and Jyu-Lin Chen, RN, PhD, FAAN<sup>1</sup>**

<sup>1</sup>University of California San Francisco, USA

<sup>2</sup>Azusa Pacific University, USA

**Purpose:** Cardiovascular disease, diabetes, and cancer are the leading causes of avoidable and premature death globally. The associated risks can be explained by health behaviors and clinical risks. Acculturation influences health outcomes. The purpose of the study was to describe and compare acculturation characteristics associated with major chronic diseases and health behaviors in California's Filipino American population. Filipinos are the second largest, permanent immigrant Asian group in the United States.

**Method:** A secondary analysis of the 2011-2012 California Health Interview Survey data of Filipino Americans ( $n = 555$ ) was analyzed for clinical risks, health behaviors, and acculturation. Statistical analyses were computed to describe, compare, and determine the association of acculturation to chronic disease and health behaviors.

**Results:** U.S.-born Filipino Americans had significantly lower proportions of chronic diseases compared to those not born in the United States. Filipino Americans who were proficient in English were less likely to have hypertension than those who were not English-proficient. Filipino Americans not born in the United States had more positive health behaviors compared to U.S.-born Filipino Americans. More Filipino Americans who spoke another language at home ate the recommended servings per week of fruits and vegetables than those who spoke English.

**Conclusions:** There are differences between chronic disease prevalence and healthy lifestyle behaviors of Filipino Americans in California. Additional research, policies, and prevention programs for culturally appropriate interventions and generational studies are needed. Health care providers and nurses should discuss adopting healthy lifestyles and chronic disease prevention in this population.

### Abstract 2

*Confronting Cardiovascular Health Disparities Among Filipino-Americans*

**Jacqueline Nguyen<sup>1</sup>, Robert Bucayu<sup>1</sup>, Brianna Williams<sup>1</sup>, Angela Torre<sup>1</sup>, and Lorraine Evangelista, PhD, RN, FAHA, FAAN<sup>1</sup>**

<sup>1</sup>University of California Irvine, USA

**Purpose:** Differences in risk factors for cardiovascular disease (CVD) as a function of ethnicity is substantial, but research in CVD health disparities in Filipino-Americans is limited. We conducted this study to 1) describe CVD risk factors - obesity, blood pressure (BP), waist circumference, and presence of hypercholesterolemia -- in Filipino-Americans; 2) examine relationships between CVD risk factors and quality of life (QOL); and 3) assess independent predictors of CVD risk and QOL.

**Method:** Eighty-eight Filipino-Americans (mean age  $54 \pm 16$  years, ranged 18-80 years, 46% male, 88% married) completed health surveys during health fairs at a local Asian market.

**Results:** Data showed that 48.9% and 36% were overweight/obese and had hypercholesterolemia; 26% had elevated systolic BP ( $\geq 140$ ) and 22% had elevated diastolic BP ( $\geq 90$ ). Physical QOL was associated with systolic BP, waist circumference, and hypercholesterolemia. After controlling for age and gender, CVD risk factors accounted for 13.2% of the variance in physical QOL.

**Conclusions:** Additional research is needed to better understand CVD risks and health disparities in Filipino-Americans. Further studies are also needed to inform the development of culturally tailored programs to enhance lifestyle behaviors and reduce CVD risks in this population.

### Abstract 3

*Reducing 30 Day Readmissions for Native Hawaiian Inpatients With Diabetes*

**Anne Leake, PhD, APRN, FNP, BC-ADM<sup>1</sup>**

<sup>1</sup>The Queens Medical Center, USA

**Purpose:** The purpose of this study was to determine the effect of Advanced Practice Registered Nurse services for an inpatient population of Native Hawaiians with diabetes on 30-day readmission (TDR) rates, and to analyze demographic and clinical correlates.

**Method:** An advanced practice registered nurse provided services for admissions consulted to the inpatient diabetes team (treatment group) at an urban, tertiary care hospital. A comparison group was identified

from the daily census (control group). Age, gender, medical insurance, body mass index, A1C, length of stay, hemodialysis, and TDR were entered in a research database.

**Results:** Both groups of admissions totaled 1,488 with a TDR rate of 12.2%. There were 37 deaths (2.49%) excluded from analysis. There was no significant difference ( $p = .06$ ) in TDR rate between the intervention group ( $n = 773$ ; 11.32%) and the comparison group ( $n = 715$ ; 13.7%). Odds ratios with 95% CI for TDR were 2.13 for uninsured versus private insurance; 1.278 for middle age versus participants older than 74 years of age; 1.25 for overweight versus obese; 0.805 for normal weight versus obese; and 0.426 for length of stay less than 15 days versus greater than 15 days.

**Conclusions:** The 11.32% rate applied to both groups reduces the total TDR by 13 days. A small reduction could have implications for hospitals with high TDR rates at risk for lower CMS reimbursement. Other studies have shown that long length of stay, no primary care physician follow-up within 7 days, and public insurance correlate with TDR. Middle age and overweight as risk factors for Native Hawaiians may be unique. Nurses can refer patients at TDR risk for advanced practice registered nurse diabetes services in the hospital or after discharge.

#### Abstract 4

##### *Improving Hypertension Management in Chinese Immigrants: Cultural Acceptability of Storytelling and Educational Videos*

**Wen-Wen Li, RN, MS, PhD<sup>1</sup> and Angela Chia-Chen Chen, PhD, RN, PMHNP-BC<sup>2</sup>**

<sup>1</sup>San Francisco State University, USA

<sup>2</sup>Arizona State University, USA

**Purpose:** The study purpose was to pilot test the cultural acceptability of the Chinese Medicine as Longevity Modality (CALM) intervention delivered via DVD for hypertension management.

**Method:** The culturally sensitive, hypertension management intervention DVDs were pilot tested with a sample of 20 Chinese immigrants (mean age: 70.9 years  $\pm$   $SD = 10.1$ ; 67% being women) via individual interviews using structured, open-ended questions. There were two parts to the presentation: 1) a storytelling DVD, and 2) a patient education program using a PowerPoint file conveyed via a video format. Both were customized to Chinese to improve their hypertension management. Content analysis was used to determine the participants' comprehension of the DVD contents and offered suggestions for refining the videos.

**Results:** The study demonstrated cultural acceptability of the proposed CALM hypertension management intervention by the Chinese participants. Specifically, participants stated several strengths of the DVDs: 1) the inclusion of real storytellers and their stories; 2) positive encouragement from seeing the people manage their hypertension so well; and 3) useful information about hypertension management, such as tips on remembering to take antihypertensive medications. Areas for improvement were 1) the DVD was too long, 2) the DVD did not include input from family members, and 3) the DVD was repetitive.

**Conclusions:** The CALM intervention, delivered via DVD, was culturally acceptable to Chinese participants. The results will help further refine the CALM intervention to help Chinese better manage their hypertension. The CALM intervention may be adopted to other Asian immigrants who share similar cultural backgrounds with Chinese.

#### Abstract 5

##### *Screening for Diabetes Distress in an Asian Pacific Islander (API) Population*

**Naomi Fukuda, MSN, APRN, BC-ADM, CDE, CPT, WCC<sup>1</sup>, Anne Leake, PhD, APRN, FNP, BC-ADM<sup>1</sup>, Krupa Gandhi, MPH<sup>2</sup>, and Eunjung Lim, PhD<sup>2</sup>**

<sup>1</sup>The Queens Medical Center, USA

<sup>2</sup>University of Hawaii, USA

**Purpose:** The study purpose was to evaluate the reliability and validity of the previously validated Diabetes Distress Scale (DDS) 17 for the API population and to develop a brief Diabetes Distress screening tool (DDS 2) for the API population.

**Method:** Retrospective descriptive study design was conducted on 419 API patients with diabetes. Reliability was assessed by Cronbach's alpha. Construct validity was assessed by Pearson's correlation between diabetes distress levels and baseline A1C levels.

**Results:** Cronbach's alpha showed great reliability in total DDS 17 score and in subscales of emotional burden, regimen distress, interpersonal distress, and physician distress ( $\alpha = 0.88\text{--}0.95$ ). Pearson's correlation demonstrated an association between total DDS score, emotional burden, regimen distress, and interpersonal distress subscales with A1C level  $\geq 7.0\%$  ( $r = .12\text{--}.21$ ,  $p < .05$ ). The DDS 2 screening questionnaire consisted of a question from interpersonal distress subscale and emotional burden subscale with highest correlations with DDS 17 total ( $r = 0.59$  each). DDS 2 showed good reliability ( $\alpha = 0.75$ ) and good validity with DDS 17 total ( $r = 0.74$ ) and A1C level ( $r = .16$ ,  $p < .01$ ). Compared to the DDS 17, sensitivity and specificity of

the DDS 2 by an average score of  $\geq 3$  (moderate distress) were 0.87 and 0.87, respectively.

**Conclusions:** Diabetes distress is the emotional and cognitive stress of dealing with diabetes daily. A higher level of diabetes distress may be correlated with poor glycemic control. The DDS 17 and DDS 2 were found reliable and valid in measuring the level of diabetes distress in an API population. Nurses can utilize the DDS 17 questionnaire or opt to use the DDS 2 screening tool to evaluate the level of diabetes distress in their API patients. Performing nursing interventions to lower diabetes distress may improve glycemic control and lower the risk for diabetic complications.

### Abstract 6

#### *Exploration of Patients' Spiritual/Religious Beliefs and Resuscitation Decisions*

**Elizabeth Freitas, PhD, APRN, ACHPN, OCN<sup>1</sup>**

<sup>1</sup>The Queens Medical Center, USA

**Purpose:** The resuscitation decision, which has the potential to reverse a premature death or prolong the dying process, is complex and can be associated with spiritual/religious beliefs, values, and quality of life. The consequences of the resuscitation decision make it imperative that nurses have an understanding of patients' beliefs and how those beliefs are associated with their resuscitation decisions. The purpose of this study was to determine the associations between hospitalized patients' spiritual/religious beliefs and their resuscitation decisions.

**Method:** A single-site, descriptive, correlational study was conducted with a convenience sample of 84 hospitalized patients enrolled between November 2015 and January 2016. The Spiritual Involvement and Beliefs Scale-Revised and Beliefs and Values Scale were used to assess spiritual/religious beliefs, and two questions (If your heart were to stop would you want someone to try to restart it? If you were to stop breathing would you want a breathing tube and machine?) to determine resuscitation decision.

**Results:** No associations were found between the demographic characteristics of this patient population and their resuscitation decisions. However, participants' Spiritual Involvement and Beliefs Scale-Revised and Beliefs and Values Scale scores varied significantly according to primary spiritual/religious beliefs and ethnicity.

**Conclusions:** Although the research evidence remains inconclusive, this study found no associations between resuscitation decisions and spiritual/religious beliefs in the hospitalized patients. The implications for nursing is that assumptions about the relationship between

spiritual/religious beliefs and resuscitation decisions should not be made. Future research on patients' resuscitation decisions should address the complexity of the decision, including individual factors such as patient understanding of medical interventions and anticipated prognosis.

### Abstract 7

#### *Cultural Care for Dying Patients in Islands*

**Sayuri Jahana, DNSc, RN<sup>1</sup> and Midori Kamizato, PhD, PHN, RN<sup>1</sup>**

<sup>1</sup>Okinawa Prefectural, Japan

**Purpose:** The purpose of this study was to explore and review how culture and religion influence the end-of-life care for cancer patients, especially cultural care for dying patients situated on the islands of Okinawa and Taiwan.

**Method:** Comprehensive literature research was conducted via an online search of six databases. Key terms included culture; customs or religion; and end of life, palliative care, death, or cancer.

**Results:** Only three articles were located. The Okinawan participants believed when a person died outside of his home and the body was brought home for the funeral, it was believed that the spirit remained at the site where the death occurred. To ensure that the spirit returned home, a ritual called "NUJIFA" was performed at the site of the death. "NUJIFA" was not only conducted to ensure the peace of the dead, it also provided grief care to the bereaved. The results of the research conducted by the nurse showed that 81 (93%) out of 87 elderly people in Okinawa knew of "NUJIFA" and 88% of the subjects hoped to die at home. This cross-cultural study was conducted in Japan, Korea, and Taiwan. Patients and families wanted the patients to die at home because their souls would not return from the hospital.

**Conclusions:** Similar characteristics were found in both Okinawa and Taiwan including people wanting to die at home and the ritual for the souls. Caring for dying patients at home should be provided in a culturally acceptable manner. Future studies are needed in order to develop a care program for home deaths.

### Abstract 8

#### *Factors Associated with Code Status Among Ethnically Diverse End Stage Heart Failure Patients*

**Yuka Hazam, MSN, BSN, PCCN, RN-BC<sup>1</sup> and Francisco O. Conde, PhD, APRN<sup>1</sup>**

<sup>1</sup>The Queen's Medical Center, USA

**Purpose:** During a hospital admission event, there is often little time taken to consider all facets of the patient and his or her family's cultural context. However, the growing diversity of patient population demands a better understanding of predictors of resuscitation preferences among end stage heart failure patients in a multicultural inpatient setting in order to support patient safety and focus on the patient's quality of life. The purpose of this study was to compare end stage heart failure patients' characteristics and differences among the four largest ethnicities related to code status during hospitalization including changing code status from full code to do not resuscitate.

**Method:** This is a population-based retrospective, descriptive study of heart failure patients who were admitted to a 28-bed medical surgical telemetry unit at a hospital in Honolulu, Hawaii between July 1, 2012, and June 31, 2014. The data collected on patients from four main ethnic groups were code status, gender, age, primary language, religious preferences, ejection fraction, number of readmissions within six months, type of insurance, and whether the code status was changed during the hospitalization.

**Results:** A logistical regression model was used considering all variables and their effect on change from full code to do not resuscitate status. The four significant predictors of change in do not resuscitate status were age, readmission rates, Buddhist religion, and diastolic heart failure.

**Conclusions:** Better awareness of code decisions predictors can help to better improve patient safety while meeting family needs. Understanding the unique background of each individual and responding specific care plan can result in the best outcomes.

### Abstract 9

*Promoting Exclusive Breastfeeding – Gaps and Recommendations*

**Subha Kukkala, DNP, MSN, PGDHE, BSN, RNC<sup>1</sup> and Sujayalakshmi Devarayasamudram, PhD, M. Phil, MSN, RN<sup>2</sup>**

<sup>1</sup>University Medical Center of Princeton, USA

<sup>2</sup>North Carolina Central University, USA

**Purpose:** Exclusive breastfeeding for a minimum of six months is the recommended practice. Healthy People 2020 established breastfeeding as a national priority. Global movement towards breastfeeding awareness, initiation, and continuation became a key focus in the current health care system. The joint commission and the National Quality Forum declared exclusive breastfeeding at discharge as one of the five core perinatal care quality indicators. This Doctor of Nursing Practice capstone project was designed to identify

the common barriers leading to low exclusive breastfeeding rates and provide recommendations to organizational stakeholders regarding the hospital practices and policies needed to support and promote exclusive breastfeeding.

**Method:** The study was conducted with 50 postpartum mothers using the Plan-Do-Study-Act model. A self-administered survey tool with 28 questions was completed by postnatal mothers on the day of discharge and two weeks post discharge.

**Results:** Perceived low milk supply (37.5%), sore nipples (18.8%), lack of confidence (31.3%), latching problems (37.5%), and maternal fatigue (31.3%) were the top five identified barriers for breastfeeding among primiparous mothers. Top five barriers related to infants included latching problems, sucking difficulties, low milk supply, poor weight gain, and doctor recommendation.

**Conclusions:** Collaborative practice between nurse leaders and administrators to encourage in-hospital exclusive breastfeeding practices is needed. Further nursing research is also needed to bridge the present gap and overcome barriers to exclusive breastfeeding. Nurse leaders can translate the evidence into the interdisciplinary care team, thereby bringing practice changes to improve exclusive breastfeeding rates. Professional support, individualized interactional educational techniques and breastfeeding policy advocacy are the key factors in promoting exclusive breastfeeding.

### Abstract 10

*Successfully Weaning Ventilator in Cervical Cord Injured Patients in Chiang Mai University Hospital, Chiang Mai, Thailand*

**Kanlaya Chunjai, RN, APN<sup>1</sup>, Torphong Boonmaprasert<sup>1</sup>, and Decha Tamdee, PhD, RN<sup>1</sup>**

<sup>1</sup>Chiang Mai University, Thailand

**Purpose:** Respiratory complications are the primary problem in Spinal Cord Injuries (SCI) that have led to death. Patients with cervical SCI usually end up on a ventilator and it is difficult to wean off. The weaning program should start early without medical condition. The purpose of this study was to assess the predicting factors that affect successful ventilator weaning in SCI patients.

**Method:** Forty-two SCI patients on a ventilator who were admitted to the Spinal Cord Injury Critical Care Unit, Chiang Mai University Hospital in Chiang Mai, Thailand were included in this retrospective study. Data were collected from 2013 to 2016 by using the

hospital database. This study was conducted with approval from the Institutional Review Board of the Faculty of Medicine, Chiang Mai University. Univariate analysis was used to identify factors related to weaning success. Multivariate analysis was used to investigate independent factors significantly associated with weaning success.

**Results:** Among 42 SCI patients with a ventilator, there were 38 cases (90.47%) that showed a successful rate of weaning. Level of consciousness ( $OR = 11.1$ , 95% CI [3.4, 59.55]), normal chest-film ( $OR = 5.8$ , 95% CI [1.2, 59.4]), normal vital signs ( $OR = 25.5$ , 95% CI [1.42, 137.5]), and normal hemoglobin/hematocrit ( $OR = 19.8$ , 95% CI [1.17, 106.8]) were factors related to successful rates of ventilator weaning.

**Conclusions:** The success rate of ventilator weaning in this study was 90.47%. There are several factors that were associated with the success rate of ventilator weaning. In nursing practice, the patients' level of consciousness, vital signs, chest film, and hemoglobin/hematocrit should be evaluated before and between weaning processes.

### Symposium Abstract 11

*Stroke Outcomes, Lengths of Stay, and Medical Costs in Chiang Mai University Hospital*

**Rujee Rattanasathien, MNS, RN, APN<sup>1</sup>, Sangworn Hanfangam, MSN, RN<sup>1</sup>, and Naratchaporn Sasiwongsakun, MSN, RN<sup>1</sup>**

<sup>1</sup>Chiang Mai University, Thailand

**Purpose:** Stroke is the leading cause of death and disability worldwide including Thailand. Stroke care services and length of stay are an increasing share of the hospital costs. Despite the impact of stroke on the Thai health care system, there has been no systematic review of strokes at Chiang Mai University Hospital. The purpose of this study was to study acute stroke outcomes, length of stay, and medical costs in a university hospital.

**Method:** A retrospective study was conducted with a review of 329 acute stroke patients' electronic medical records who underwent treatment from January to December 2014 at Chiang Mai University Hospital. The modified Rankin Scale was used to identify the patient outcomes at the time of discharge.

**Results:** For all types of stroke (hemorrhagic stroke and ischemic stroke) and transient ischemic attack patients; hemorrhagic stroke patients with and without operative treatment had a statistically significant length of stay and medical costs. Ischemic stroke patients who received and who did not receive thrombolysis treatment had statistically significant medical costs. All types of stroke patients had a statistically

significant modified Rankin Scale at the time of discharge. Meanwhile, there were no statistical differences between hemorrhagic stroke patients with and without operative treatment and ischemic stroke patients with and without thrombolysis treatment.

**Conclusions:** Patient care teams and nurses should focus on interventions to improve the outcomes of stroke patients without operative treatment and thrombolysis treatment. Nurses have a crucial role in the reduction of length of stay and medical costs in a tertiary hospital.

### Symposium Abstract 12

*Risk Factors of Hemorrhagic Stroke in Working Aged Patients*

**Suphannee Triamvisit, MSN, APN, RN<sup>1</sup>, Wilaiwan Chongruksut, PhD, RN<sup>1</sup>, Wanarak Watcharasaksilp, MD<sup>1</sup>, and Rujee Rattanasathien, MNS, APN, RN<sup>1</sup>**

<sup>1</sup>Chiang Mai University, Thailand

**Purpose:** Stroke is the third leading cause of morbidity and mortality in Thailand accounting for a significant and increasing share of hospital costs. The purpose of this study was to identify risk factors associated with hemorrhagic stroke (HS) in working aged patients in Chiang Mai University Hospital.

**Method:** A five-year retrospective, descriptive study was conducted. The subjects were diagnosed with HS, aged 15-59 years, and were admitted to Chiang Mai University Hospital from January 2009 to December 2013.

**Results:** A total of 404 working aged patients who had a HS were admitted during this review period with 60.9% males and 39.1% females. The average age of the patients was 47.5 ( $SD = 9.8$ ) years, and 76.7% admitted to the hospital were transferred from other hospitals. Nearly 60% of patients had an intracerebral hemorrhage. Severe HS occurred in 32.9% of the patients with a Glasgow Coma Score from 3-8. More than two-thirds (69.3%) of the HS patients required surgery. The top five risk factors for HS were hypertension (83.4%), hyperlipidemia (38.9%), alcohol consumption (21.5%), smoking (15.3%), and drug non-compliance (14.9%). About 40% experienced an infectious complication. Significant risk factors of HS by multivariate analysis were female ( $p < .001$ ), drug noncompliance ( $p < .05$ ), and hypertension ( $p < .05$ ).

**Conclusions:** Raising awareness to reduce risk factors and promote health in the community are the keynotes for health care providers in working aged patients' HS prevention.

## Symposium Abstract 13

### *Outcomes and Predicting Factors of Working Aged Hemorrhagic Stroke Patients*

**Suphanee Triamvisit, MSN, APN, RN<sup>1</sup>, Wilaiwan Chongruksut, PhD, RN<sup>1</sup>, Wanarak Watcharasaksilp, MD<sup>1</sup>, and Rujee Rattanasathien, MNS, APN, RN<sup>1</sup>**

<sup>1</sup>Chiang Mai University, Thailand

**Purpose:** Stroke is the leading cause of morbidity and mortality, accounting for a significant and increasing share of hospital costs in Thailand. The purpose was to study disability outcomes (poor outcomes) and predicting factors at the time of discharge from the hospital in working aged patients with hemorrhagic stroke who underwent treatment at Chiang Mai University Hospital.

**Method:** A five-year retrospective, descriptive study was conducted. The subjects were diagnosed with hemorrhagic stroke, aged 15-59 years, and were admitted to Chiang Mai University Hospital from January 2009 to December 2013. The modified Rankin Scale was used to classify the patient outcomes at the time of discharge. Predictors of poor outcomes consisted of demographic data and risk factors identified through multiple regression analysis.

**Results:** Three hundred sixty-five working aged patients with hemorrhagic stroke underwent treatment during the study period with 78.6% of the patients transferring from other hospitals. The mean baseline Glasgow Coma Score was 10.8 ( $SD = 3.8$ ). At the time of discharge, 55.3% of those patients had poor outcomes (modified Rankin Scale scores of 4 [*moderately severe disability*] or 5 [*severe disability*]). The significant predictors of poor outcome by multivariate analysis were Glasgow Coma Score at admission ( $\leq 8$ ,  $p < .001$ ), operative treatment ( $p < .001$ ), infection ( $p < .01$ ), intracerebral hemorrhage ( $p < .01$ ), and being female ( $p < .01$ ).

**Conclusions:** More severe baseline Glasgow Coma Score after transfer from other hospitals are crucial for the health care services system or stroke network. Systematic transferring into a stroke network may be warranted to improve the effectiveness of stroke care.

## Abstract 14

### *The Attitudinal Attributes Required for Nurses in Geriatric Intermediate Care Facilities (GICFs)*

**Chiharu Miyata, PhD<sup>1</sup> and Hidenori Arai, MD, PhD<sup>2</sup>**

<sup>1</sup>Kyushu University, Japan

<sup>2</sup>National Center for Geriatrics and Gerontology, Japan

**Purpose:** Japan is getting older and older. More than 26% of the population is 65 years or over. Therefore, the needs and quality of geriatric nursing should be improved. At the same time, the standards and requirements in geriatric facilities are also changing. However, very little research has focused on nurses in GICFs in Japan. Thus, the purpose of this study was to clarify the attitudinal attributes required for nurses in GICFs.

**Method:** A qualitative exploratory descriptive research design was used in this study. The study participants were three clinical nurse specialists of geriatric nursing and five nurse managers from geriatric care facilities. A purposive sampling was used.

**Results:** Four descriptive themes related to the attitudinal attributes required for nurses of GICFs were identified: comprehensive care, respect of personhood, the clinical leader, collegiality, and collaboration.

**Conclusions:** This study presented a set of data from interviews with nurses and nurse managers at GICFs. The study sought to investigate the perceptions of attitudinal attribute approaches to quality of care development. Participants were able to express their understanding of their role and describe the characteristics or attributes they saw as vital for nurses of GICFs. Also offered, was data on how attitudinal attributes were obtained and insights into the differences between GICFs and medical facilities. Participants were also able to identify the issues that may hinder or stifle quality of care development in the aged care environment and recommendations were made that have implications for nursing practice.

## Abstract 15

### *The Effect of an Eight-Week Self Care Program on Self-Perceived Compassion Fatigue*

**Me Fuimaono-Poe, APRN-Rx, FNP-BC<sup>1</sup>, Frederic Alarcon BSN, RN-BC, Kathleen King, FNP-BC, Katherine Johnson, CNS-BC, and Rui Fang, MS**

<sup>1</sup>The Queens Medical Center, USA

**Purpose:** The purpose was to explore the impact of a personalized self-designed care plan (SCP) on the burnout (BO) risk in registered nurses (RNs). The study compared changes in self-reported compassion fatigue (CF), BO, and secondary stress scores (STS) using the Professional Quality of Life Questionnaire in a group of RNs.

**Method:** We used a quasi-experimental research design. RNs were recruited to participate in a demographic questionnaire and the Professional Quality of Life Questionnaire for an eight-week self-care program. The Professional Quality of Life Questionnaire is a 30-item tool that uses Likert-type responses ranging from 0 to 5. It has three subscales: BO, CF, and STS. Participants were recruited at the workplace and agreed to weekly entries into Survey Monkey. Scores were compared before and after participation. Participants were asked their opinion regarding the helpfulness of the study.

**Results:** We recruited 120 RNs were recruited, and of these, 40 RNs were able to be matched both pre- and post-data based on self-identified identifications and passwords. After participation, there was a lower statistically significant BO score ( $p = .033$ ), CS scores were marginally increased ( $p = 0.54$ ) with no significant change in STS. In response to the qualitative open-ended question, 61 participants believed it was helpful, 10 did not, and 21 were not sure.

**Conclusions:** There was a statistically significant reduction in BO, without significant changes in CF and STS scores. Stress in the current health care environment affects job performance, patient safety, and personal satisfaction. Coping strategies such as Mindfulness Based Stress Reduction may help prevent negative effects.

### Abstract 16

*Prevalence and Correlates of Depression, Anxiety, and Stress Among Filipino-Americans in the United States*

**Lorraine Evangelista, PhD, RN, FAHA, FAAN<sup>1</sup>, Robert Bucayu<sup>1</sup>, Brianna Williams<sup>1</sup>, Angela Torre<sup>1</sup>, and Jacqueline Nguyen<sup>1</sup>**

<sup>1</sup>University for California Irvine, USA

**Purpose:** Immigrants from the Philippines have quadrupled in number in the United States in the last four decades. They are the largest Asian-American minority in the country. However, there is a paucity of data related to the psychological morbidity of Filipino-Americans, which raises concerns as depression, anxiety, and stress are not only health problems by themselves, but also associated with other negative health consequences. This cross-sectional study was conducted to determine the prevalence and correlates of depression, anxiety, and stress in a sample of Filipino-Americans who were seen at a community-based blood pressure screening program.

**Method:** Eighty-eight adults, aged  $53.6 \pm 15.6$  years, 54% women, completed the Hospital Anxiety and Depression scale, a self-reported perceived stress survey,

and the Short-Form 12 quality of life (QOL) questionnaire.

**Results:** The overall prevalence of depression, anxiety, and stress were 14.8%, 35.2%, and 36.4%, respectively. Depression was associated with younger age, being married, anxiety, and QOL. Anxiety was associated with depression, stress, and QOL. Stress was associated with younger age ( $r = -206$ ,  $p < .05$ ), being married ( $r = -213$ ,  $p < .05$ ), and anxiety ( $r = .359$ ,  $p < .01$ ).

**Conclusions:** Although depression rates were fairly low among Filipino-Americans in the study, anxiety and stress were moderately high. The high association between psychological morbidity and perceived physical and mental QOL signifies the need to screen for these comorbidities among Filipino-Americans, especially among younger and married adults. Strategies to enhance perceived physical and mental QOL through improved health care services may be key to reducing depression, anxiety, and stress in this population.

### Abstract 17

*The Association Between Posttraumatic Stress Disorder and Telomere Length: An Integrative Review*

**Jonica Estrada<sup>1</sup>, Katrina Isla<sup>1</sup>, Marianne Tejada, DNP, MSN, RN, PHN<sup>1</sup>, Hyunhwa Lee, PhD, MSN, APRN, PMHNP-BC<sup>1</sup>, and Andrew Thomas Reyes, PhD, RN<sup>1</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

**Purpose:** An emerging marker of cellular aging is telomere length (TL). Recent studies have investigated the link between TL and symptoms of posttraumatic stress disorder (PTSD). The purpose of this study was to review and critically evaluate the current state of knowledge regarding TL in humans with PTSD.

**Method:** A thorough search using PubMed, Scopus, and CINAHL returned 142 articles with keywords including “telomere” and “posttraumatic stress disorder.” Only original studies published with human subjects were included in this review.

**Results:** A total of 11 articles were selected for full-text review. All studies were published between 2011 and 2016. The majority of the studies were cross-sectional ( $n = 9$ ) and four articles studied soldiers. The sample size ranged from 43 to 3,000 subjects. Quantitative polymerase chain reaction is a method often used to measure TL by extracting leukocyte DNA ( $n = 10$ ). To determine the symptom severity of PTSD and/or relevant clinical symptoms, the studies utilized the clinician-administered PTSD scale ( $n = 3$ ), the

MINI International Neuropsychiatric Interview ( $n = 2$ ), or the Beck Depression Inventory ( $n = 2$ ). The studies concluded that there may be a significant correlation of TL and PTSD based on shorter TL with PTSD compared with ones in controls.

**Conclusions:** Cellular aging may occur more in patients with PTSD than in healthy controls. Further studies are recommended to examine the association of TL with treatment outcomes as well as to identify factors influencing TL, such as ethnicity, gender, and physical activity, which will contribute to the development of the individualized care for patients with PTSD.

### Abstract 18

*Pattern of Quality of Life Among Stroke Persons Within Six Months Post Diagnosis*

**Pratum Soivong, PhD, Dip. APMSN, MSN, RN<sup>1</sup>, Danil Wongsu, MSN<sup>2</sup>, and Jindarat Chairat, PhD, RN<sup>1</sup>**

<sup>1</sup>Chiang Mai University, Thailand

<sup>2</sup>Maharaj Nakorn Chiang Mai Hospital, Thailand

**Purpose:** Stroke causes physio-psycho-social consequent problems resulting in low quality of life (QOL). Health professionals need to understand the change in QOL during the first six months post stroke diagnosis. This research aimed to explore patterns of QOL among stroke patients six months post diagnosis.

**Method:** Thirty-nine stroke patients receiving treatment at a university hospital were included. Participants were asked to complete the Thai version of Stroke Specific Quality of Life Scale before discharge, and one, three, and six months after discharge. Data were analyzed using cluster analysis.

**Results:** The results demonstrated that there were four patterns of QOL among stroke participants within six months post diagnosis: (1) six domains of QOL (energy, family role, mobility, self-care, social role, and work/productivity domains) tended to increase, (2) two domains of QOL (language and vision domains) tended to increase and become stable, (3) two domains of QOL (thinking and upper extremity function domains) tended to decrease and rise later, and (4) two domains of QOL (mood and personality) tended to decrease and be stable. The results of this study provide basic information for health professionals to be aware of the QOL among stroke patients, especially in the first six months after diagnosis.

**Conclusions:** This information can be used to develop an appropriate intervention for stroke patients at different period of time after stroke diagnosis.

### Abstract 19

*Cardiovascular Risk Factors Among College Students: Knowledge, Perception, and Risk Assessments*

**Dieu-My Tran, PhD, RN<sup>1</sup>, Lani M. Zimmerman, PhD, RN<sup>2</sup>, and Kevin Kupyck, PhD<sup>2</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

<sup>2</sup>University of Nebraska Medical Center, USA

**Purpose:** The purpose of this study was to assess knowledge and perception of cardiovascular risk factors (CRFs) in a college population, screen their cardiovascular risks, and cluster subgroups with similar and dissimilar characteristics.

**Method:** A convenience, descriptive research was conducted on 158 college students at a Midwestern university. The participants' average age was 24.33 years old (aged 19-39 years). Participants' socio-demographics, knowledge and perception of CRFs, and cardiovascular biomarkers were assessed. The pooled cohort risk equations and Framingham 30-year cardiovascular disease (CVD) assessments were acquired. Hierarchical clustering analysis was used to identify subgroups of high-risk individuals.

**Results:** College students were knowledgeable ( $M = 13.9$ ,  $SD = 2.30$ ) about CRFs but did not perceive themselves at risk for CVD. There were no significant ( $p > .05$ ) relationships between knowledge and perception of CRFs. Knowledge of CRFs was correlated with lifetime risk estimates  $r(156) = .17$ ,  $p = .048$ , and perception of CRFs were positively associated with the Framingham 30-year CVD estimates  $r(156) = .16$ ,  $p = .048$ . The average lifetime risk assessment (31.4%) was higher compared to the average 30-year CVD assessment (4.8%). The clustering technique identified white, single males with a family history of heart disease, overweight/obese, hypertensive, and occasionally consumed red meats as the higher risk group.

**Conclusions:** High knowledge level of CRFs is not sufficient to maintain optimal cardiovascular risk estimates, but changing the perception of CRFs may play a bigger role in long-term cardiovascular risks. Risk assessment tools can identify high-risk subgroups that should be targeted for cardiovascular risk reduction and are readily available and easy to use by health care providers, especially nurses.

### Abstract 20

*Asian American Women's Resilience: An Integrative Review*

**Andrew Thomas Reyes, PhD, RN<sup>1</sup> and Rose E. Constantino, PhD, JD, RN, FAAN, FACFE<sup>2</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

<sup>2</sup>University of Pittsburgh, USA

**Purpose:** The aim of this presentation is to explore the current state of knowledge regarding the resilience of Asian American women.

**Method:** Whittemore and Knafl's (2005) integrative review method was used to examine the current state of knowledge of Asian American women's resilience. As part of the integrative review method, 12 databases were used to identify related articles: Academic Search Premier, CINAHL, ERIC, Ethnic NewsWatch, GenderWatch, ProQuest Dissertations and Theses Global, ProQuest Sociological Abstracts, PsycINFO, PubMed, SAGE (Psychology and Sociology collections), Scopus, and Web of Science. Twenty-one research studies met the inclusion criteria of the integrative review.

**Results:** Five common themes emerged from the analysis of the studies: (a) resilience conceptualized as a coping strategy, (b) resilience as related to social support and network, (c) resilience as an enduring phenomenon, (d) resilience as connected to bicultural identity, and (e) resilience as an emancipatory perspective and experience.

**Conclusions:** These themes imply that resilience is a developmental process, culture has a significant influence on resilience, and Asian American women are a vulnerable and marginalized group. Specific recommendations for nursing practice and research will be discussed as related to these implications.

## Abstract 21

*Parenting Practices Within the Familial/Cultural Context: A Mixed Methods Approach*

**Tsui-Sui Annie Kao, PhD, FNP-BC<sup>1</sup>**

<sup>1</sup>University of Toledo Medical Center, USA

**Purpose:** Parenting practices play an important role in adolescent health behavior, but knowledge about how they operate within and are influenced by the context of culture is limited. This mixed-methods study explored how families' racial and/or cultural socialization might be relevant to parenting practices with a sample of 31 Chinese/Taiwanese American, African American, and Caucasian adolescents and their parents ( $N = 78$ ).

**Method:** We conducted two rounds of interviews, four to six months apart, with each parent-adolescent dyad/triad (148 interviews total) to understand how family dyads/triads perceived adolescent health risks within the context of a family's racial and cultural socializations. In addition, the Perception of Adolescent

Health Risks and Parenting Style questionnaires were administered to examine the relationship between parenting style and perceived adolescent health risks. Finally, interview and survey data were synthesized and compared to gain a nuanced understanding of the cultural influences on parenting style/practices as well as participants' perceived adolescent health risks, a proxy for perceived susceptibility of adolescents. The qualitative findings were used to help understand and clarify the quantitative results.

**Results:** Results indicate that for the diverse families, parenting practices are influenced by parents' situational and historical experiences as well as cultural and religious beliefs. Health-related parenting practices (i.e., when and how to intervene) are related to parent perceptions of adolescents' health risks (i.e., perceived susceptibility).

**Conclusions:** Parenting style measures may not be able to fully capture diverse families' parenting practices. The need for future research to incorporate influences stemming from parents' situational, historical, cultural, and religious experiences is discussed.

Saturday, March 25, 2017 (2:15 p.m. – 4:00 p.m.)

## Symposium Abstract 22

*mHealth and Wearable Technology Application in Global Health*

**Jillian Inouye, PhD, FAAN<sup>1</sup>**

<sup>1</sup>University of Hawaii Manoa and University of Hawaii John A Burns School of Medicine, USA

**Overview:** With the increasing complexity of care needed to maintain health and prevent diseases, mHealth and wearable technology offer tools to ease the burden. However, technology may not be applicable to anyone other than Western countries. This symposium proposes to discuss several mHealth and wearable technology tools that may be appropriate and feasible to vulnerable populations and Asian American Pacific Islanders (AAPIs). The moderator, Dr. Inouye, will discuss effective strategies that incorporate mHealth tools to improve self-management, adherence to treatment, or use in underserved populations. Dr. Serafica will present a study on the feasibility and acceptability of a technology based 8-week dietary social support intervention using social media (Facebook) as a platform among Filipinos in the United States. Dr. Morris will present the design of a mobile application for tracking of diet and nutrition intake among AAPIs. Dr. Lukkahatai will present the use of an integrated wearable device and phone application to measure fatigability in the live environment and the possibility of using this integrated system among

AAPIs. Dr. Kawi will identify various sources of evidence-based, opioid-related, patient information using mHealth, and discuss opioid utilization with a global perspective, especially among AAPIs. Lastly, Drs. Lao and Lee will present the virtual reality applications to treating vision problems in traumatic brain injury or cerebrovascular attack and discuss benefits of such treatment for neurological rehabilitation. These presentations will enhance support for the use of mHealth and wearable technology and the opportunities that these technologies can provide to address various health care needs among AAPIs.

### Symposium Abstract 23

#### *The Feasibility of Using Social Media for Dietary Self-Management in Vulnerable Populations*

**Reimund Serafica, PhD, MSN, RN<sup>1</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

**Purpose:** The influence of social networks and social engagement has become the focus of much research as the rise of social media continues to alter the way people interact with one another. Online social networking is popular among Filipinos and is becoming a new cultural norm. The addition of status updates and photo uploads plus peer interactions and discussions has become a social phenomenon among Filipino online users of Facebook (FB), and it can be expanded as a platform to promote positive lifestyle and self-management (SM) of chronic diseases in Filipinos. This study examined the feasibility and acceptability of a technology based 8-week dietary social support intervention using social media (FB) as a platform among Filipinos in the United States.

**Method:** The study was a prospective, descriptive design, which consisted of ( $N = 20$ ) Filipino-Americans at risks for hypertension recruited from a primary clinic who met the study's inclusion criteria.

**Results:** Preliminary findings suggest that the images and textual post to FB's wall page offered a clear support for the claim that FB was a feasible and acceptable platform to conduct dietary self-management interventions based on 60% ( $n = 12$ ) of the participants' initial increase in fruits and vegetable consumption by midpoint collection (week 4).

**Conclusions:** The use of FB as a platform can be a cost-effective way to conduct dietary self-management interventions in the immigrant population. Findings from this study could be helpful in the development of culturally appropriate lifestyle interventions using mhealth technology through social media to improve dietary health among immigrants.

### Symposium Abstract 24

#### *Enabling Technology for Effective Personalized Nutrition Tracking*

**Brendan Morris, PhD<sup>1</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

**Overview:** The rise of mobile devices has empowered individuals to take control of their health through personalized tracking technology. A user can keep track of sleep patterns, steps, and activity, as well as diet and nutrition through mobile apps for personalized intervention and goal setting. However, the acceptance, utility, and ultimate effectiveness of these systems depend on usability and the appropriate level of feedback and guidance. Systems that require high levels of manual effort for data entry and logging or deep health knowledge have poor retention and prolonged usage statistics. Effective monitoring techniques are required that provide high-resolution data with minimal user input/effort.

This presentation will discuss the design of a mobile application for tracking of diet and nutritional intake. Unlike many popular apps, this proposed system will not require significant effort to record intake but rather utilizes new advances in computer vision and deep learning to facilitate logging. The app is designed based on the observation that people love to take images of their food. By simply taking a picture of a meal, machine learning vision algorithms will utilize the image and geo-location information to determine nutritional content. All images and data are stored in the cloud to generate weekly consumption reports and provide healthy living recommendations.

The use of mobile app technology can provide better nutrition data points for more effective health and lifestyle management since it does not rely on imperfect memory or tedious traditional diary techniques, which hinder long-term adoption.

### Symposium Abstract 25

#### *Wearable Devices and Smart Phone Application for Fatigability Measurement*

**Nada Lukkahatai, PhD, MSN, RN<sup>1</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

**Overview:** Fatigue is a complex phenomenon, often reported as one of the most distressing symptoms. Its underlying mechanism, specifically in Asian American Pacific Islanders (AAPIs), is unknown. An emerging concept, fatigability, has been proposed to provide an alternative method to better understand the conceptual model of fatigue mechanism. The use of wearable devices and smartphone applications to measure fatigability among AAPIs will be discussed.

Current fatigue measurements rely on a subjective recall of intensity and interference, which is often influenced by retrospective recall bias. The concepts of ecological momentary assessment (EMA) and fatigability are introduced as innovative concepts and behavioral measurements to minimize these biases. Fatigability measures the change in energy level during a standardized physical activity such as treadmill walking at a specific speed. An integration of a wearable device and a smartphone application (mEMA; ilumivu, Cambridge, MA) can capture the energy changes by allowing incoming data (e.g., heart rate, walking steps) measured by the wearable device to trigger the mEMA application to launch a momentary survey directly on the mobile phone.

AAPIs have a unique lifestyle and physical activities. This feature allows for continuous monitoring of physical activity and heart rate, and will measure fatigability of people in their natural environment. The understanding of fatigue and the underlying mechanism of fatigue is needed for nurses to provide effective fatigue management. The integration system provides inside information on patients' fatigue especially with AAPI in their living environment.

## Symposium Abstract 26

### *Evidence-Based Online Information on Opioids*

**Jennifer Kawi, PhD, MSN, APRN, FNP-BC, CNE<sup>1</sup> and Angela Ruckdeschel, RN, MSN, PhD Student<sup>1</sup>**

<sup>1</sup>University of Nevada, Las Vegas, USA

**Purpose:** Worldwide, opioid dependence is the largest cause of disease burden accounting for 9.2 million disability-adjusted life years. In the United States, approximately 259 million opioid prescriptions were written in 2012, sufficient to supply a bottle of pills to every adult. Other countries are suffering from underutilization resulting in poor pain control even for cancer. The World Health Organization and other international agencies have campaigned for better access to opioids. Asian Americans and Pacific Islanders (AAPIs) have minimal opioid consumption.

Patient education is critical to these current opioid concerns due to widespread misinformation, misperceptions of safety, nonadherence, and lack of patient education during rushed office visits. The internet has been extensively used for opioid information but may provide misleading data. This study aimed to review opioid information that is available online to provide evidence-based data that can potentially assist in the opioid epidemic.

**Method:** We conducted a systematic review of opioid information online. We searched federal agencies, organizations, foundations, guidelines, social media, YouTube, "apps," including google.

**Results:** Most evidence-based information for patients exists in federal agency websites (NIDA, CDC, FDA, VA, SAMSHA). Content were primarily on storage, disposal, and responsible use; realistic expected benefits; risks and side effects; alternatives to opioids; opioid tapering; communicating with healthcare providers; opioid agreements and consents; tolerance and dependence; use of other substances; misuse, abuse, and diversion; addiction, overdose, appropriate actions, and resources; and information for families, parents, and teens. The majority were in the text, many handouts, some videos, and few audio fact sheets. There was minimal translation to other languages, particularly in Spanish.

**Conclusions:** There are several options for obtaining evidence-based opioid information online. These data can assist in empowering individuals to be well-informed of opioids that can assist in safe pain control. With inequitable access to opioids and underutilization among AAPIs, this evidence-based information can be helpful as a step to facilitating pain self-management and safe opioid use.

## Symposium Abstract 27

### *Virtual Reality Applications to Treatment for Traumatic Brain Injury and Cerebrovascular Accident*

**Joseph Lao, OD<sup>1</sup> and Hyunhwa Lee, PhD, MSN, APRN, PMHNP-BC<sup>2</sup>**

<sup>1</sup>Optic Gallery, Las Vegas, NV, USA

<sup>2</sup>University of Nevada, Las Vegas, USA

**Overview:** Individuals with brain injuries, including traumatic brain injury (TBI) and cerebrovascular accident (CVA), often suffer several life-long neurological deficits. Vision problems are one of the most common neurological symptoms in TBI or CVA. Insult to the brain usually affects several unspecified areas of the brain involved in visual processing and perception (e.g., cranial nerves or vision-associated cortices), and result in various vision issues. Possible issues include reduced depth perception, double vision, eye-movement disorders, and visual processing issues.

With the advancement of technology, 3D and virtual reality have become increasingly popular sources of entertainment. For more than leisure, virtual reality provides a powerful tool in treating patients with TBI or CVA suffering from visual dysfunctions. This presentation will discuss a virtual reality program, originally designed for amblyopia and strabismus (i.e., lazy eye), as a possible avenue to treating patients with TBI and CVA experiencing visual dysfunction. In particular, perceptual and orthoptic treatment for patients with limitations on motor control and ambulation can more actively participate during the rehabilitation process via virtual reality. Specific images

are sent through each eye to train the brain to process and utilize vision more efficiently. Expected outcomes include the brain being rehabilitated to improve functional vision of a patient experiencing particular visual disturbances.

The use of virtual reality technology can provide real-time feedback and performance for patients and clinicians through scores and performance measures. Potentially on a mobile platform, it can help the patients to be more engaged in their treatments. Because vision is not only what we see but also involves how the brain makes sense of what we see (perception, processing, and integration), treating the vision problems among patients with TBI or CVA can improve physical movements as well as cognitive functions.

## Symposium Abstract 28

### *Physical Activity Advising During Pregnancy in Asia*

**SeonAe Yeo, WHNP-BC, PhD, FAAN<sup>1</sup>**

<sup>1</sup>University of North Carolina at Chapel Hill, USA

**Overview:** We previously reported guidelines for physical activity during pregnancy in the United States, Canada, Denmark, France, Norway, Spain, and United Kingdom. Professional organizations, such as American College of Obstetricians and Gynecologists in the United States, in these nations, set guidelines for exercise, including contraindications, activities to avoid during pregnancy, guidance on exercise prescription and activities to perform, and signs and symptoms to end exercise during pregnancy. Most guidelines support moderate intensity physical activity during pregnancy and indicated specific frequency and duration/time recommendations. These guidelines generally rule out sports with risks of falls, trauma, or collisions.

Less is known about guidelines or norms about physical activities during pregnancy in Asia. It has been known that certain lifestyles during the prenatal period are linked to traditional beliefs in women's health in Asian countries. Limited evidence is available, however, whether prenatal care providers negotiate cultural practice with evidence-based practice. In order to understand the state of research and practice guidelines for physical activity during pregnancy and pregnant women's behaviors associated with physical activity in East South and East Asia. This symposium will report the results of three preliminary works to address the need and to facilitate the development of culturally competent practice guidelines for pregnant women in Asia.

Studies were conducted to:

1. Evaluate systematic reviews of exercise interventions during pregnancy and postpartum;

2. Examine the determinants of exercise habits during pregnancy with women in Tokyo; and
3. Explore the state of guidelines for physical activity during pregnancy in Republic of China, Taiwan, Thailand, Laos, Philippine, and Japan.

## Symposium Abstract 29

### *Review of Exercise During Pregnancy and Postpartum-Evidence from the Cochrane Reviews*

**Erika Ota, PhD, RNM, RN, RPHN<sup>1</sup>**

<sup>1</sup>St. Luke's International University, Japan

**Purpose:** The purpose of this overview was to summarize evidence from the Cochrane database of systematic reviews regarding the effects of exercise on maternal well-being during pregnancy and postpartum and on perinatal outcomes.

**Method:** We searched the Cochrane library to identify all relevant Cochrane systematic reviews of the effects of exercise interventions on women during pregnancy and postpartum. Two authors independently evaluated reviews for inclusion, extracted data, and assessed the evidence and methodological qualities using a measurement tool for assessment of multiple systematic reviews (AMSTAR).

**Results:** Ten Cochrane systematic reviews were included. Based on the results, five effective interventions for pregnancy and two effective interventions for postpartum women were identified:

1. Low-risk women receiving combined diet and exercise intervention to prevent gestational diabetes mellitus had a reduced risk of preterm birth compared with women not receiving any intervention.
2. Regular aerobic exercise during pregnancy appears to improve or maintain physical fitness.
3. Diet and/or exercise during pregnancy can reduce the risk of excessive gestational weight gain, especially in high-risk women.
4. Any land- or water-based exercise may reduce pregnancy-related low-back pain.
5. Pregnant women without prior urinary incontinence who were randomized to intensive antenatal pelvic floor muscle training (PFMT) were less likely to report urinary incontinence up to six months after delivery than women randomized to no PFMT or usual antenatal care.

In the postpartum period, women who exercised did not lose significantly more weight than women in the usual care group. However, women who took part in a diet plus exercise program lost significantly more weight than those in the usual care group. Postnatal

women with persistent urinary incontinence three months after delivery who received PFMT were less likely to report urinary incontinence at 12 months post-delivery than those who did not PFMT or who received usual postnatal care.

**Conclusions:** Evidence from the Cochrane reviews indicated some benefit of exercising during pregnancy and the postpartum period for the mother and baby.

### Symposium Abstract 30

*Exercise Habits During Pregnancy and its Related Factors: A Cross-Sectional Observational Study, Japan*

Megumi Haruna, PhD, RM, RN, PHN<sup>1</sup>

<sup>1</sup>University of Tokyo, Japan

**Purpose:** Regular exercise during pregnancy is expected to provide maternal health benefits. We aimed to examine exercise/sports habits and related factors among pregnant women with normal pre-pregnancy body mass index scores.

**Method:** We investigated healthy pregnant women with normal pre-pregnancy weights (body mass index 18.5 to 24.9 kg/m<sup>2</sup>), during the 3rd trimester, at a university hospital in Tokyo, Japan. Demographic data, the perception of their pre-pregnancy body size, concern with being overweight, weight control behaviors, and healthy eating habits were obtained from medical records and a self-administered questionnaire. Physical activity including exercise and sports were assessed by the Pregnancy Physical Activity Questionnaire. 'Participation in exercise/sport' was defined as including women who reported physical activity in any kind of exercise/sport. The Ethical Committee of the Graduate School of Medicine, University of Tokyo, approved the study procedures and protocol.

**Results:** Data from 286 pregnant Japanese women with normal pre-pregnancy body mass indexes were analyzed. A total of 145 (52.3%) women participated in exercise/sports during the 3rd trimester. Multiple logistic regression analysis indicated that women who set a target for gestational weight gain (*AOR* = 5.86, 95% CI [2.09, 16.5], *p* = .001) and women who used healthy eating as a means of preventing being overweight (*AOR* = 1.53, 95% CI [0.93, 2.51], *p* = .097), were more likely to participate in exercise/sports. In contrast, multiparas (*AOR* = 0.55, 95% CI [.33, 0.92], *p* = .023), and women who considered themselves as being overweight based on their pre-pregnancy body weight (*AOR* = 0.56, 95% CI [.33, 0.97], *p* = .037), were less likely to do any exercise/sports. Working status, seasonal differences, concerns with being over-

weight, desire to lose weight after childbirth, and dietary nutritional guidance, were not related to participation in exercise/sports.

**Conclusions:** Setting targets for gestational weight gain may provide motivation for participating in some exercise/sports. Multiparas and women who are susceptible to feeling overweight are more motivated to participate in exercise/sports than their counterparts.

### Symposium Abstract 31

*Current State of Guidelines for Physical Activity During Pregnancy Among Southeast and East Asia*

Masayo Matsuzaki, PhD, RM, RN, PHN<sup>1</sup>

<sup>1</sup>University of Tokyo, Japan

**Purpose:** Exercise during pregnancy has some benefits such as preventing pregnancy complications. The purpose of this review was to summarize the current state of the guidelines in Asia.

**Method:** We focused on the guidelines of Japan, Republic of China, Taiwan, Thailand, Laos, and the Philippines. The country-specific governmental and clinical guidelines on physical activity during pregnancy were researched from PubMed (Medline) and internet government sites in 2016. In addition, we researched maternity notes published from government and other files and medical text which used health professionals. The guidelines and information of physical activity during pregnancy were researched by four researchers (P. S. E. and L). They have Master of Science degrees and three researchers have a nursing certification in their home countries.

**Results:** By hand search including internet websites, medical textbooks, and interviewing health professionals; we found limited information. We did not locate widely practiced guidelines for physical activity during pregnancy in Republic of China, Taiwan, Thailand, Laos, and the Philippines. However, in Thailand, Laos, and the Philippines, we found that the guidelines for the Integrated Management of Childhood Illness by World Health Organization have been partially adopted. The guidelines describe activities to avoid but no prescription. In Taiwan, we found that some obstetricians utilize the contraindications against exercise listed in the American College of Obstetricians and Gynecologists guidelines, which the Ministry of Health and Welfare distributed. China has detailed guidelines for occupation-related physical activities. In Japan, Obstetricians adopted the guidelines by the Japanese Society of Clinical Sports Medicine. The guidelines were based

on Japanese and English research reports and showed details. Further analysis will be reported.

**Conclusions:** We identified limited information for pregnancy-related physical activity guidelines in Asia. In the future, guidelines are needed for pregnant women in Asia.

Sunday, March 26, 2017

## Oral Presentations

Sunday, March 26, 2017 (9:50 a.m. – 10:35 a.m.)

### Symposium Abstract 32

*A Technology-Based Physical Activity Promotion Program for Asian American Midlife Women*

Wonshik Chee, PhD<sup>1</sup>, Soo Jin Lee, PhD, RN<sup>1</sup>, Sangmi Kim, MPH, RN<sup>2</sup>, Xiaopeng Ji, MSN, RN<sup>2</sup>, Soo Young Park, MSN, RN<sup>2</sup>, Eunice Chee, BSE<sup>3</sup>, and Eun-Ok Im, PhD, MPH, RN, CNS, FAAN<sup>1</sup>

<sup>1</sup>Duke University, USA

<sup>2</sup>University of Pennsylvania, USA

<sup>3</sup>University of North Carolina, USA

**Purpose:** With an increasing multicultural aging population in the United States, depression in midlife ethnic minorities has become more significant than ever. Depression is often unrecognized and untreated especially in ethnic minorities despite its high prevalence, and ethnic minorities rarely seek help for depression. Furthermore, midlife is a life stage of multiple changes that cause additional stress to ethnic minorities, which subsequently makes them at increased risk of depression. As a preventive strategy for depression among midlife ethnic minorities, physical activities have been suggested. The research team developed a theory-driven technology-based physical activity promotion program for midlife Asian American women in the United States. The purpose of the study was to examine the efficacy of the program in enhancing midlife Asian American midlife women's depressive symptom experience. The program provided individual and group coaching/support and information through educational modules, online forums, and online resources.

**Method:** The study consisted of 33 midlife Asian Americans who were recruited through Internet communities/groups. The Kaiser Physical Activity Survey and the Center for Epidemiologic Studies Depression Scale were used to collect the data. The data were analyzed using an intent-to-treat linear mixed-model growth curve analysis.

**Results:** Only discrimination stress showed statistical

significances in the group effect (.18,  $p = .08$  for control) and time effect (-.04,  $p = .04$ ), but not in the group  $\times$  time effect ( $p = 0.51$ ). The active living habits scores had statistical significances in the group effect (0.82,  $p < .01$  for control), time effect (.29,  $p < .01$ ), and group  $\times$  time effect (-.31,  $p = .03$  for control).

**Conclusions:** The findings support the efficacy of a technology-based physical activity promotion program in reducing discrimination stress and increasing active living habits of an ethnic minority group of midlife women in the United States. Further studies with diverse groups of midlife women across the globe are warranted to confirm the reported findings.

### Symposium Abstract 33

*Insomnia, Cardiovascular Risk Factors, and Depression Among Midlife Women*

Ok-Kyung Ham, RN, PhD<sup>1</sup>, Bo Gyeong Lee, RN, PhD Candidate<sup>1</sup>, and Eun Ju Choi, RN, MS<sup>1</sup>

<sup>1</sup>Inha University, Korea

**Purpose:** Sleep disturbance or insomnia is prevalent in women. Insomnia is associated with higher prevalence of hypertension and cardiovascular disease in the general population, while chronic insomnia may contribute to increased anxiety, depressive symptoms, and decreased quality of life. The purpose of this study was to investigate differences in cardiovascular risk factors and depression according to the level of insomnia among midlife women.

**Method:** This study used a non-experimental, cross-sectional study design. A convenience sample of 423 midlife women was recruited in the community setting. Study instruments included demographic characteristics (age, education, income, employment, and marital status) and biological characteristics (menopausal status, BMI, waist circumference, blood pressure, glucose, and lipid profile). Insomnia was measured by the Insomnia Severity Index (ISI) and depressive symptoms were measured using the Center for Epidemiological Studies Depression Scale. Analyses of covariance was conducted to examine differences in biological characteristics and depression according to ISI.

**Results:** The mean age was 55.0 years ( $SD = 6.01$ , ranged 40-65 years). Half of the participants (50.8%) had obtained education above high school level, 81.0% were married or cohabitated with a partner, 47.0% were employed, and 73.0% were menopausal. Total cholesterol and triglyceride were significantly different by the ISI levels after controlling for age and BMI ( $p < .05$ ). Total cholesterol level was the highest

in the moderate/severe insomnia group, while triglyceride was the highest in the sub-threshold insomnia group. Center for Epidemiological Studies Depression Scale was significantly different by the ISI ( $p < .05$ ). The moderate/severe insomnia group exhibited more depressive symptoms than their counterpart.

**Conclusions:** Insomnia is significantly associated with some cardiovascular risk factors and depressive symptoms. Therefore, interventions are needed to mitigate insomnia, which will in turn help to reduce cardiovascular risk and depression among midlife women.

### Symposium Abstract 34

*Gender Differences in the Effects of a Diabetes Self-Management Program on Diabetes Health Beliefs, Self-Efficacy, and Self-Management Behavior: Older Adults in South Korea*

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**Purpose:** Studies have reported that there are gender differences in diabetes self-management, especially in health beliefs and attitudes related to diabetes. This study aimed to identify gender differences in the effects of a health literacy considered diabetes self-management program on diabetes self-management knowledge (DSK), diabetes health beliefs, diabetes self-efficacy (DSE), and diabetes self-management behavior (DSMB) in older adults in South Korea.

**Method:** This was a randomized control study among 56 older adults (26 in the experimental and 25 in the control groups; 5 dropped out) with diabetes who were recruited through two senior centers in D and G districts in South Korea. The study was conducted from July 6 to December 28, 2015. The health literacy considered diabetes self-management program included 12 weekly sessions based on the Fransen's causal pathway and incorporated multiple strategies based on the behavior change theory. The health literacy considered diabetes self-management program specifically considered older adults' background characteristics and their health literacy. The instruments included the Korean Health Literacy Assessment Tool-4, the Diabetes Self-Management Knowledge for Older adults, the Health Belief scale for diabetes patients, the Diabetes Management Self-Efficacy Scale for Older adults, and the Summary of Diabetes Self-Care Activities Questionnaire. Independent  $t$  tests, Fisher's exact tests, and Mann-Whitney tests were used for data analyses.

**Results:** The average age of the participants was 74.45 years ( $SD = 4.78$ ), and about 57% of the participants were female. At pre-test, there were no significant differences between the intervention and the control groups in both genders. At post-12 weeks, there were significant differences in DSE ( $p = .036$ ), diabetes self-management behavior ( $p = .018$ ), and self-monitored blood glucose sub-scale ( $p = .003$ ) between the groups in men. At post-12 weeks, there were significant differences in diabetes health beliefs ( $p = .001$ ), DSE ( $p = .046$ ), and self-monitored blood glucose sub-scale ( $p = .007$ ) between the groups in women.

**Conclusions:** The intervention was effective in changing DSE and diabetes self-management behavior in men and diabetes health beliefs, DSE, and self-monitored blood glucose sub-scale in women. Further studies on gender differences in diabetes self-management experience are needed with diverse groups of older adults across the globe.

### Abstract 35

*Roadmap for Success: Models for Educating Minority Nurses in Behavioral Health*

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**Overview:** The Minority Fellowship Program (MFP) at the American Nurses Association is presented as an effective program that has produced evidence-based outcomes related to innovative strategies for the minority PhD and DNP Fellows enrolling in colleges and universities in the United States. The Program's mission is to educate ethnic minority nurses with expertise in mental health and substance abuse disorders that are prepared to assume leadership positions in education, research, practice, and health policy. The traditional MFP has more than 40 years history of successfully educating and mentoring nurses at the doctoral level. The newest addition to the MFP is the Minority Fellowship Program-Youth (MFP-Y). The MFP-Y has the mission to prepare psychiatric nurses with the expertise to provide behavioral health services to underserved minority youth, adolescents, and transitional-aged youth. Both these programs are supported by the Substance Abuse and Mental Health Services Administration, a federal agency charged with improving the quality and availability of prevention, treatment, and rehabilitative services in order to reduce mental health and substance abuse disorders. The presentation will stress innovative approaches used by the MFPs to en-

hance the clinical and research knowledge and leadership skills of the Fellows pursuing doctoral or master's degrees in psychiatric mental health and substance abuse nursing. The MFP Training Model and the use of technology, social media, and other innovative strategies are approaches used for teaching, monitoring, mentoring, coaching, and evaluating the MFP programs. The presentation will describe the program's innovative approaches and achievements. It will conclude with a vision for the future of MPF programs at the American Nurses Association.

### Abstract 36

*Increasing Awareness of the Professional Approach for Mongolian Midwives Using a Health Care Pamphlet for Prevention of Obesity During Pregnancy*

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**Purpose:** Recently, obesity during pregnancy has been an important issue in midwives' clinical practice in Mongolia. Regarding this issue, a seminar and workshop were held by the Twinning project between the Japanese Midwives Association and the Mongolian Midwives association. The purpose of this study was to lead their own approaches for improving obesity during pregnancy by motivating Mongolian midwives.

**Method:** The seminar and workshop were held on August 30, 2016, in Ulaanbaatar. There were 110 midwives from across the country. The session consisted of lectures including our original pamphlet for the prevention of obesity during pregnancy and discussion about the utilization of the pamphlet with the group work. We analyzed descriptions written by each group. This study was conducted under the approval of the Institutional Review Board at Kyushu University.

**Results:** Regarding the pros and cons of using the pamphlet, almost all of the midwives expressed positive comments. The pregnant women would be able to

gain appropriate knowledge and to increase awareness of healthy dietary habits. However, they may feel stress, particularly obese women and low-income families. For midwives, they can improve their instruction skills. They suggested dealing with health promotion nationwide including family member support through mass media. They suggested similar seminars and workshops for both pregnant women and their medical staff in each hospital.

**Conclusions:** By using the pamphlet, Mongolian midwives found methods to prevent obesity during pregnancy. Furthermore, they recognized the importance of promoting their professional competency through the seminar and workshop.

### Abstract 37

*An International Adjunct Faculty Experience*

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**Overview:** The objective of this partnership is to support the efforts of Uganda Christian University to graduate master's prepared registered nurses to improve the supply of nursing faculty for students in Uganda's entry-level nursing programs. The availability of nurses to meet the health care needs of the nation of Uganda is severely compromised by the nursing faculty shortage, which in turn is limited by the national funding dedicated to health care. The pathways to becoming adjunct and assisting in the endeavor were developed through a Uganda Christian University partnership with Bethel University (Minneapolis/St. Paul) and the availability and selection of faculty through volunteer pathways, such as the Fulbright Specialist program and faculty networks. The partnership has resulted in many benefits to the students and faculty, and the positive impact upon Uganda's health care is beginning to be felt. The data will become evident through student's thesis, and thus will serve as a repository of Ugandan health care continuous quality improvement through evidence-based practice. A summary of the Master of Science in Nursing curriculum, adjunct process, and student theses are presented. The experiences in supporting Uganda Christian University's Masters in Nursing Science program may be utilized with exploring the partnership between East and West nursing education. The similarities and differences in the challenges in this partnership may

serve as a global teaching and learning experience for nursing educators. The efforts of Western nursing educators entering a partnership with other countries may serve as an example in building a partnership between East and West nursing educators.

The conference objective, *to discuss global health issues in research, practice, and leadership relevant to nurses living and practicing in different parts of the world*, will be addressed by a panel presenting an overview of Uganda Christian University's visiting

nursing adjunct professor program, facilitated through a partnership with Bethel University, St. Paul, Minnesota. The sharing of global health issues between Ugandan and United States students and faculty creates vibrant dialogue. Faculty are solicited through Fulbright and other external sources to fill the teaching faculty roles. The panel session will review the dynamics and logistics of this international adjunct program.