

urbanicity, higher BMI ($F=100.6$, $\text{sig}<0.05$), raised LDL cholesterol ($F=5.12$, $\text{sig}<0.05$) and lower level of physical activity ($F=9.85$, $\text{sig}<0.05$). Quantification of urbanisation using a multi-component scale is feasible in a developing country setting. Several NCD risk factors are associated with increased level of urbanisation identifying possible points of intervention over the development cycle to augment the chronic disease impact of urbanisation.

OT14-6

Health Outcome Expectancies Predict Fruit and Vegetable Consumption Behavior

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Consuming fruits and vegetables impacts health and helps reduce risks of certain cancers and diseases. Despite knowledge of guidelines, most Americans do not consume enough. In Expectancy Theory, an individual's outcome expectancies help predict behavior. This cross-sectional study examined differences between daily servings of fruits and vegetables participants thought they needed for health benefits compared to knowledge of health experts' recommendations, and the relationship of these differences to reported consumption. Participants were 3,169 adults from a random-digit-dial telephone survey. Most participants were female (66.5%), married (60.0%), and had some college education or more (74.7%). Participants included Whites (41.5%), Asians (33.9%), and Hawaiians/Pacific Islanders (14.1%). Both knowledge of recommendations ($r=.390$, $p<.001$) and health outcome expectancies ($r=.586$, $p<.001$) were positively correlated with consumption behavior, and significant differences existed by categories for outcome expectancies, $f(2, 3166)=81.51$, $p<.001$. Tukey posthoc comparisons indicated that those with positive health outcome expectancies (those who thought they needed to eat more servings than recommended by experts) reported greater consumption than those with neutral (needed same as recommended) or negative (needed less than recommended) outcome expectancies ($p<.001$). In addition, those with neutral outcome expectancies had greater consumption than those with negative outcome expectancies ($p<.001$). It appears that positive and neutral health outcome expectancies are correlated with greater fruit and vegetable consumption. Future research should address health outcome expectancies in addition to knowledge in order to increase consumption.

OT14-7

Multi-Objective Transferal Medical Service Spatial Location Model

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Transferal medical service is a new policy for Taiwan prime care service in recent years. Although it just started, more and more clinics joint in indicated the prospective of future success. Due to the complexity and lack of similar math model to handle the assignment of grouping the transferal medical service this study develops a Multi-objective Transferal medical service Spatial Location model, MTSL, to deal with the spatial aspect of location decision which not yet been dealt with. MTSL uses the spatial data from Taichung City and County to provide a spatial and capacity equity toward the residents within. The variables used are spatial address point, prime care location points, hospital location point and medical center location point as the basic data. The model itself is based on multi-objective operation research and the process required Voronoi and P-Center algorithm. The result is the locations and boundaries for each transferal medical service group which contain at least 3 types of clinic out of 5 different types which include Family medicine, Ophthalmology, Dentistry, Chinese medicine and Rehabilitation. The capacity of each assigned transferal medical service group is given by using the average of population over hospital within the study area. The final map indicated 71 transferal medical service groups with average about 36,350 residents accessing nearest clinic with the average of 492.74 meters, the standard deviation for capacity and distance are 6,266, 522 with respect which is a fairly good result.

Oral Track 15- Social Determinants of Health

OT15-1

Cancer Patients' Satisfaction with Communication, Information Given by Nurses at Teaching Hospitals of Tehran City, Islamic Republic of Iran

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Effective patient-professional communication can be of crucial importance to long-term psycho- social outcomes in patients with cancer. A cross sectional study was carried out to examine patients' satisfaction with regard to various aspects of communication and information given by nurses. A proportional stratified sampling method was done and data was collected via face-to-face interview based on a validated Patient Satisfaction Questionnaire (PSQ) during a 3 month period. A total of 384 patients aged 14 years old and above were selected. The majority of respondents were males (52.4%) and married (66.4%), working (52.6%) and age group 45-54 year (26.4%) with secondary education level (44.8%),

and (54.0%) of them admitted at teaching hospitals of government A University of Medical Science. The findings revealed that a vast majority of these respondents (81.5%) was satisfied with communication and information given by nurses, while the others (18.5%) were not. There was significant relationship between patients satisfaction and age group ($p < 0.05$). Also, the age group 15-44 years old and married patients were the best predictors for level of cancer patients' satisfaction with communication, information given by nurses. Key findings are that there are a number of issues with regard to information and communication which can be clearly improved within teaching hospitals of Tehran city. The paper concludes that patient-professional communication should be tailored to meet individual need.

OT15-2

Are Children of Foreign-Born Mother Not as Healthy as Those of Native-Born Mother?

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The number of cross-border marriages and the children born in those families in Taiwan has significantly increased from the 1990s. Media reporting suggested that children of foreign-born mother have worse health status than those of Taiwan-born mother. This study is to examine whether there are health disparities among children of China-born, Southeast Asia-born and Taiwan-born mother. Data for the analysis came from two waves of Taiwan Birth Cohort Pilot Study of 1617 nationally representative new born babies, conducted from April to June in 2004 and May to July in 2005, respectively, at the age of 6 and 18 months old. The babies were grouped into those of China-born, Southeast Asia-born, and Taiwan-born mother. Health variables examined include adverse birth outcome (prevalence of preterm birth, low birthweight and birth defect), early child development (attainment of developmental milestones at 6 and 18 months of age), and health conditions (child injury and fever, infectious or gastrointestinal diseases). No significant differences were found among three groups for prevalence in preterm birth, low birthweight and birth defect. Children of Southeast Asia-born mother experienced significantly poor motor developmental attainment ($OR = 1.69, 1.10-2.61$). However once controlling for family socioeconomic characteristics, the risk of adverse motor development for children of Southeast Asia-born mother disappeared ($OR = 1.56, 0.99-2.46$). Children of Southeast Asia-born mother had lower risk of fever, infectious or gastrointestinal diseases ($OR = 0.44, 0.27-0.73$) than those of Taiwan-born mother regardless of their disadvantaged family socioeconomic position. Children of Southeast Asia-born and China-born mothers did not experience worse health status in Taiwan.

OT15-3

Health Behaviors, Personal Characteristics and Healthy Aging: Cross-Sectional Evidence from the Health-Related Quality of Life Study among the Elders in Zhejiang Province of China

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In China, elderly population is expanding at a rate of 5.96 million per year which results in an increase in the burden of chronic disease leading to low quality of life. So, we conducted a cross-sectional study based on a multistage cluster sample of 4995 elderly people, 2441 in rural area and 2554 in urban area, aged 60 years and over in Zhejiang Province of China. A self-developed structured questionnaire and the SF-36 were used as an instrument of assessment.

Comparing to the elders living in rural area, the elders in the urban had much better self-related quality of life, with high proportions of scores above 70 in 8 dimensions of the SF-36 (PF 72.0%, RP 76.3%, BP 89.1%, GH 23.3%, VT 79.6%, SF 86.7%, RE 81.3%, MH 79.3%). Of 4157 subjects responding to the living arrangement, 17.54% were living alone and had significantly low scores in sub-scales of the SF-36 except BP and SF ($p < 0.05$).

The results indicated that not only in urban area, but also in rural area, high age, female, low level of yearly income and no drinking history were correlated with low quality of life. But, the factors of physical exercise and yearly income, respectively, played significantly important role in improving the quality of life of older adults in urban and rural areas.

Generally, it is important to take pertinent measures to promote healthy aging in urban and rural areas, respectively, for the distinctions of t

OT15-4

Assessing the Use of the Family Affluence Scale as Socioeconomic Indicators for Researching Health Inequalities in Adolescents

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Introduction: Inequality in socioeconomic status has been shown to be predictors of key health indicators in young children and adults. However, the association between socioeconomic inequality and health among adolescents was less clear. The purposes of this study were to examine the completion rate, internal reliability,

and external validity of the Family Affluence Scale (FAS), and to examine its ability to detect health inequality among adolescents.

Methods: The data came from a 2009 school-based survey of 3368 students (1741boys, 1627girls), aged 11 to 18 years old in Kinmen County of Taiwan. Indicators of the familial social position were parental occupation and education. Indicators of material affluence were number of cars, vacation travels, own room and computers in the family (FAS items).

Results: Father's occupation was reported by 85.6% of the schoolchildren, 54.0% reported on mother's occupation, and 88.8% on parents' education, while over 98% reported on the FAS items. The Cronbach's alpha of the FAS scale was modest (0.36). The associations between the FAS scores and parental occupation and education were low but statistically significant.

Consistent gradients were found for positive health and some health behaviors in association with FAS.

Conclusions: The Taiwan version of the FAS showed good completion rate, adequate internal reliability and moderate external validity. The clear associations between the FAS and health indicators confirm previous studies and suggest that the FAS can be used as an additional measure of socioeconomic status among adolescents.

OT15-5

Assessing the Level of Disclosure among Women Experiencing Breast Cancer and Their Husbands ***Yusoff Nasir¹, Wah Yun Low², Cheng Har Yip²***

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Background and objectives: The level of disclosure could be a good indicator to marital well-being. This paper assesses couples' level of disclosure and factors predictive of women's level of disclosure at post-chemotherapy for breast cancer.

Method: One hundred and fifty seven women with breast cancer and their husbands answered the Level of Disclosure Scale. Data was collected at three time points: 7, 14 and 23 weeks following diagnosis. High score of the scale indicate high level of disclosure. Medical and socio-demographic data were also gathered.

Results: Mean age of the women and their husbands were 48.29 (± 8.85) and 52.21 (± 9.01) years old respectively with mean duration of marriage 22.61 (± 9.9) years. Most of the women were diagnosed with stage two of breast cancer. Women's level of disclosure significantly increased throughout the treatment phases (prior= 15.99 ± 4.46 ; during= 17.77 ± 5.34 ; post-chemotherapy= 17.92 ± 5.27). Regression analysis indicated that women's disclosure prior to chemotherapy explained 94% of the variance of women's disclosure post-chemotherapy. However, women's disclosure during chemotherapy, husbands' disclosure at all treatment phases, couples' ages, duration of marriage and duration of breast cancer did not predict women's

disclosure. Types of surgery and breast cancer stages were not an important factors affecting couples' level of disclosure.

Conclusion: Counselors should assess client's level of disclosure at different phases of breast cancer treatment in order to understand the marital and global public health issues.

OT15-6

Health-Related Quality of Life (HRQOL) in Chinese Women with Urinary Incontinence: A Pilot Study ***Yaojie Xie¹, Suzanne Ho¹, Zhong He²***

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Women with Urinary incontinence (UI) are more likely to report a poorer quality of life(QOL). The lack of data on the QOL of female UI in Chinese mainland led us to conduct this study. **Objective:** To evaluate the HRQOL in Chinese women with UI; To examine the impact of UI on women's HRQOL; To determine the association between risk factors and HRQOL. **Method:** 95 women(age>18) with UI who sought medical attention at PUMC Hospital were recruited. A questionnaire consisting of SF-36, ICIQ(International Consultation on Incontinence Questionnaire), SSRS(social support scale), demographic characteristics and medical information was used to interview. The SF-36 score of a previous large survey in general Chinese women was as the normalized score for comparison; The ICIQ and SSRS were used to assess the symptoms of UI and social support condition respectively.

Results: 1) Compared with the normalized score, women with UI had lower mean domain scores(P<0.05); 2) The vast majority of the women considered that their urinary problems affected their physical activities in daily life, and almost half reported negative consequences for sex life and sentiment; 3) HRQOL was significantly ($p < 0.05$) associated with limit in daily activities, sexual quality, negative sentiment, education level, severity of symptoms, duration of UI symptoms, age, social support, income.

Conclusion: Urinary incontinence significantly impairs the HRQOL in women, suggesting the need for more social and medical study in this area.

OT15-7

Quality of Life of Migrant Labor in Samut Sakhon Province, Thailand

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This cross sectional-study was conducted to assess quality of life of migrant labors in Samut Sakhon province which attracts migrant labor in seafood

processing industry. 279 migrant labors who were over 18 years old, and working more than 6 months were interviewed by health volunteers using the structured-questionnaire in February 2008. The data were analyzed by Chi-square test and multiple logistic regression analysis. Almost all of the migrant labors (91.5%) were Myanmar nationality, about half of them (53.8%) were educated at a primary level. More than half of them (61.7%) were manufacturing workers, and the average monthly income was 5,168.7 baht. For quality of life, 49.8% and 50.2% of the migrant labors had a high satisfactory level for physical and mental components respectively. It was found that age, sex, educational achievement, occupation, monthly income, documentation and history of illness were significant associated with physical component of quality of life ($p < 0.01$). For mental components of Quality of Life, sex, educational achievement, occupation, monthly income, documentation and history of illness were significant variables ($p < 0.01$). The three significant predictors of physical component of Quality of Life by multiple logistic regression analysis were living conditions (adjusted OR=4.09, 95%CI=1.97-8.51, $p < 0.001$), working conditions (adjusted OR=4.59, 95%CI=1.99-10.59, $p < 0.001$) and educational achievement (adjusted OR=2.86, 95%CI=1.07-7.60). The three significant predictors of mental components of Quality of life were history of illness (adjusted OR=3.13, 95%CI:1.020-8.19, $p=0.020$), living conditions (adjusted OR=2.30, 95%CI:1.41-4.62, $p=0.020$), and working conditions (adjusted OR=5.93, 95%CI=2.28-15.42, $p < 0.001$). The provincial health officers should be more focused on occupational health program of migrant labor to protect them from job-related health problem and also living conditions need to be improved.

OT15-8

Gender Differences of Health Behavior in Kazakhstan

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Objective: To study of health behaviour gender differences of Kazakhstan population.
Context: Gender factor have a significant influence on the health of population in Kazakhstan that leads to gender mortality gap and gender differences of morbidity rates. In connection with it we have conducted investigations in the sphere of gender peculiarities of health behavior among adolescents and adults. Analysis of morbidity rate showed that boys' morbidity higher than girls' among children aged 0-14 y. ($p < 0.001$), but in the group of adolescents aged 15-17 y. girls' morbidity higher than boys' ($p < 0.001$). It is established

that boys more often try to use harmful substances, have earlier sexual intercourse debut, spend more time playing computer games, but they have higher level of physical activity and more positive self-esteem in comparison with girls. Girls characterized by higher rates of subjective psychosomatic complaints, low level of life satisfaction and self-rated health. Multifactor analysis established that life circumstances factors such as family, school, peers have a gender specific influence on the adolescents' health behaviour.

Gender differences of psycho-emotional factors and gender specific features of life style and health behavior were revealed among adult population.

Conclusion: Thus, revealed gender differences of health behavior and life circumstances factors should be taken into account to provide different needs of population gender groups and in developing health policy and public health programs in Kazakhstan sensitive to gender issues.

Oral Track 16- Community Health

OT16-1

Building Environmental Health Capacity in the State of Qatar: A Canadian Experience

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Developing and building a professional, sustainable environmental health workforce is one key feature of the College of the North Atlantic-Qatar's (CNA-Q) mandate to build human resource capacity in the State of Qatar. CNA-Q provides a Canadian based, student centered post secondary training institution in the State of Qatar. Integrating Canadian environmental health officer competencies of the Canadian Institute of Public Health Inspectors certification body (CIPHI) into a cross cultural, English as a second language environment are both unique, challenging opportunities to environmental health capacity building. The successful features of the environmental health program at CNA-Q include the following process indicators: 1. The Environmental Health curricula foundation based on 488 instructional objectives identified by CIPHI over 16 major topic areas. 2. Focus group meetings attended to by the Supreme Council of Health and private industry. 3. A Canadian standard for Environmental Health course content, outcome objectives, performance evaluation, and academic council approvals. 4. Language training pre-requisite standards for entrance to the Environmental Health Program. 5. Full sponsorship opportunities for Qatari Nationals entering the Environmental Health program. 6. Work-term experiential practicum's offered to all students. 7. Environmental health course reviews every two years with stakeholder input. 8. Professional development opportunities to existing environmental health officers with the CNA-Q "Train the Trainer" program. The goals of the presentation are to identify the successes, the unique cross cultural opportunities, and