

who caring for disabled persons were defined as the case group, while the subjects in the family without disabled person were defined as the control group. This study compared the case group of the scores of Physical Component Summary (PCS) and Mental Component Summary (MCS) in SF-36 with that of the control group. Further, to analyze the factors of the characteristics of caregivers and disabled persons related to the health of primary caregivers.

Results: This study recruits 207 cases and 828 controls as the ratio of 1:4. The results show the mean scores of PCS and MCS in case group significantly lower than that in control group (PCS: 50.6 vs. 51.6; MCS: 46.2 vs. 48.5) and the related factors include job status, religion, and disability type (congenital or senile). Caregivers caring for persons with congenital disability lower level of mental health has, contrast to those caring for persons with senile disability have lower level of physical health.

Conclusions: This study provides solid data proving caregivers have the lower level of health status through the national wide survey, indicating the health issues of caregivers must be the top of long term care agenda.

FP-206

Physical and Mental Health among the Families of Patients with Psychosis— A Case-Control Study **Ling-Ling Yeh**

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Objectives: This study compared physical and mental health of the families of psychotic patients with that of the families living without psychotic patients.

Methods: The secondary dataset of National Health Interview Household Survey 2001 derived from National Health Research Institution. The ratio of the number of case and control group was 1:4 and matched by gender and age. The former group was the families living with patients diagnosed as ICD9_CM code 290-299. The latter group was the families living without psychotic patients. The health was measured by SF-36. Owing to different subjects from the same household, this study conducted multilevel analysis to explore the physical and mental health in the case and control groups.

Results: This study recruits 563 cases and 2252 controls. The results reveal all the mean scores in 8 subscales of SF-36 of the case group (47.8-53.8) less than that of the counterpart (48.8-54.9). After multilevel analysis by controlling gender, age, marriage status, education level, religion, and household income, the difference of mental component summary score statistically signifies between case and control group, while there is no significantly difference of physical component summary score.

Conclusions: This study implies those who living with psychotic patients feel poor mental health. Therefore, the policy makers not only concern the health of primary caregivers of psychotic patients but also the health of the other families. It also emphasizes to advocate the national wide mental health campaign should be a top priority.

FP-207

Who Are Willing to Buy Long-Term Care Insurance? **Hsiang Tsuei, Kun Yang Chuang**

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Objectives: The purpose of this research is to identify factors associated with the intention to purchase long-term care insurance.

Methods: Households were randomly selected using a automated dialing system and eligible respondents aged 50 or more were selected for telephone interviews. Information collected included demographic characteristics, health status, living arrangement, and views on long-term care.

Results: Results shows that the intention to purchase long-term care insurance was associated with being male, younger, higher level of education, and higher income. Furthermore, those who were financially prepared for long-term care expenses, and those who perceived themselves to be institutionalized were also more likely to have the intention of purchasing long-term care insurance.

Conclusion: The older respondent did not perceive the need to purchase long-term care insurance probably due to the fact that there were not financially prepared and were probably already made relevant long-term care arrangements. For the younger respondents, it appears that the likelihood of being institutionalized in the future and the availability of financial resources will affect the intention to purchase long-term care insurance.

FP-208

A Longitudinal Analysis of Retirement, Spousal Loss, and Self-Assessments of Health among Older Adults in Taiwan

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Objectives: An increasing attention in social epidemiological research has been paid to the profound impact of life events on health status change for older adults. This study examines the effects of retirement and spousal loss on longitudinal change in self-assessments of health among community-dwelling older adults from 1989 to 2003.

Methods: Data on this study for 1,388 older adults aged 60-64 in 1989 were drawn from the national representative sample in the Taiwan Longitudinal Study of Aging (TLSA). Self-assessments of health consisted of self rated health and psychological distress measured by a short version of the Center for Epidemiologic Studies-Depression Scale. Analyses employed generalized estimating equations models with five waves of the TLSA data.

Results: After adjusting for age, gender, education, ethnicity, and other baseline individual socioeconomic and physical health covariates, significant cross-sectional associations ($p < 0.01$) were found between retirement and self rated health, with retirees reporting better health

status than the non-employed. Yet, aging decreases this positive effect of retirement. Analyses also showed that spousal loss before age 65 was significantly associated with higher levels of psychological distress and the magnitude of this relationship increased with age for older adults ($p < 0.05$).

Discussions: Our findings suggest a positive, but not necessarily causal association of retirement with global evaluation of health as well as a negative, but possibly longitudinal association of spousal loss before age 65 with mental health decline. Programmatic strategies aimed at promoting health of older populations could particularly benefit from considering life transition.

FP-209

Unemployment and Psychological Distress

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In Japan, unemployment rate has increased (5.0% in 2009). Unemployment might affect mental health among Japanese, as it has been associated with increased suicide rate in Japan. The study objectives are: to 1) compare psychological distress among the unemployed and the employed, and 2) investigate factors associated with psychological distress among the unemployed, based on a national representative study in Japan. A large cross-sectional survey was conducted in 2007 of households and their members in unit areas randomly selected nationwide in Japan, with self-administered and interview questionnaires. Data of 19,006 respondents aged 18-64 were analyzed. Unemployment was defined twofold: those who did not have a job ($n=1612$) and who looked for a job ($n=597$). Psychological distress was measured by K6 scale with a cut-off score of 5+. We compared the prevalence of psychological distress between the employed and the unemployed, adjusting for age, marital status, household income, chronic physical condition and treatment for mental illness for men and women separately; we conducted multivariate logistic regressions of psychological distress on these covariates among the unemployed. For men and women, for both definitions of unemployment, the unemployed had significantly greater risk of psychological distress than the employed, after adjusting for the covariates. Low household income and treatment of mental illness explained some variance of psychological distress among the unemployed. Conclusions Unemployment was associated with greater psychological distress in Japan, independent of income and medical conditions. Acknowledgements Thank you to Akihiro Nishi, Masao Tsuchiya and Akiomi Inoue.

FP-210

Prevalence of Back Pain and Pain-Related Health Disparities in Hawaii

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Back pain has been recognized as having a major impact on personal well-being and health care costs, but reliable current data on back pain prevalence and disparities are scarce. This study evaluates the rate of back pain and its relationship to socio-demographic variables in representative sample for the State of Hawaii. In a random digit dial telephone survey ($n = 1,573$), 48.9% of the participants reported having experienced back pain at some point in their lives. Of those, 50.9% reported back pain in the previous 3 months with an average of 35 pain days ($SD=37.5$) and a mean perceived pain intensity of 4.6 ($SD=2.1$) on a scale from 0-10. While the mean number of self-reported sick days due to back pain in the previous 3 months was 2.0 ($SD=11.1$), participants reported that pain interfered with their activities of daily living (ADL) on a mean of 6.7 days ($SD=20.7$). Among the socio-demographic variables, pain was most closely related to ethnicity. While participants who self-identified as Chinese reported the highest number of days with pain, they also reported the lowest mean pain intensity. Native Hawaiians reported the highest pain intensity and the highest interference of pain with their ADL. The results of this study indicate that back pain is a highly prevalent and under-recognized phenomenon in Hawaii. More research is needed to evaluate its impact on quality of life, potential health disparities, and implications for prevention and treatment.

FP-211

Reliability and Validity of the Malay Version of Inventory of Socially Supportive Behavior (ISSB): A Study among Malaysian Women Diagnosed with Breast Cancer

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Background and objectives: This paper assessed the validity and reliability of the Malay Version of Inventory of Socially Supportive Behavior (ISSB).

Method: Sixty eight newly diagnosed local women were recruited from the university hospital and general hospital located in Kuala Lumpur. Patients were interviewed on a one-to-one basis.

Results: Mean age was 48.29 ($sd=8.85$) years old. Most of the women were diagnosed with stage two of breast cancer (56.9%, $n=91$) and were of Malay ethnicity.

Test-retest evaluation was carried out at two phases which are at three weeks and ten weeks following surgery. Excellent internal consistency was confirmed with cronbach's alpha at 0.96. This version indicated small sensitivity to change with Effect Size Index (ESI) at 0.18 and low Intraclass Correlation Coefficients at 0.03. However, for the discriminant validity, no significant difference was observed between mastectomy and lumpectomy group.