

are calculated separately by each one-year interval age groups in each year. Macroeconomic indicators (economy growth rate, consumer price index, and unemployment rate by age groups) are also quarterly calculated. Statistical analysis consisted of descriptive and Age-Period-Cohort model using HLM.

Results: 1. TFRs for first birth were affected by tempo-effect, while TFRs for second and above births were largely affected by quantum-effect. 2. Economy indices (unemployment rate and consumer price index variation rate) had a negative impact on both first and second and above births. However the economy growth rate had a positive effect on childbearing. 3. Macroeconomic indicators exercised independent influence on age, cohort and period.

Conclusion: These findings suggest that the government should intensify employment stability and support policy for reconciliation of work and family in order to encourage the childbearing.

FP-098

Follow Up Survey on Abnormal Menstrual Cycle of Nursing Students

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Objective: Nursing students are reported as high risk group of abnormal menstrual cycle. We investigated the prevalence of the abnormal menstrual cycle in nursing students and carried out follow up survey after 15-20 years later to clarify the prognosis of the abnormal menstrual cycle.

Subjects and methods: Subjects were 66 university nursing students aged 20-23 years old. The menstrual cycle of them were investigated by using menstrual cycle record of 12 months in 1985-1992 and they were reassessed in 2005.

Results and conclusion: The prevalence of the abnormal menstrual cycle of the nursing students was 27.3%. The abnormal menstrual cycle was improved in 13 cases out of 18 students after 15-20 years later. The results suggest that the abnormal menstrual cycle of young nursing students of twenties may improve along with maturity.

FP-099

The Mediating Effect of Cross-Cultural Adjustment on Workplace Social Capital and Individual's Psychological Distress among Taiwan's Foreign Workers

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Objectives: The impact of cross-cultural adjustment on individual's psychological health is an important issue to be concerned in the expatriate management. The workplace social capital can facilitate the adjustment of

foreign workers when they are working in different countries. This study was designed to investigate the relationships between individual's workplace social capital, cross-cultural adjustment and perceived psychological distress among Taiwan's foreign workers. We also test whether cross-cultural adjustment plays a role of mediating effect on the relationship between workplace social capital and individual's psychological distress.

Methods: A total of 344 foreign workers from four countries including Thailand, Vietnam, Indonesian and Philippine in Kaohsiung, Taiwan were surveyed from April to June 2009. A structural self-reported measure, including questionnaires of workplace social capital, cross-cultural adjustment, and general health questionnaire was given to all participants.

Results: The perceived workplace social capital, cross-cultural adjustment and psychological distress of foreign workers varied substantially by nationalities. Individual's workplace social capital was positively associated with his /her cross-cultural adjustment and negatively associated with psychological distress. The cross-cultural adjustment of foreign workers was negatively associated with psychological distress. In hierarchical multiple regression analysis, our results showed that the cross-cultural adjustment had a completely mediating effect between individual's workplace social capital and psychological distress.

Conclusions: Our study demonstrated individual's cross-cultural adjustment mediated the relationship between workplace social capital and psychological health. To promote the psychological health of foreign workers in Taiwan, the important issues of workplace social capital and cross-cultural adjustment need to be concerned and worth further studied.

FP-100

Applying the Theory of Planned Behavior on Exploring the Substance Abuse Tendency in the Early Adolescence

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Based on the escalation theory of drug abuse, the abuser adopted the legal addictive substance in their early adolescence and then used the illicit substance later in their adulthood. These illicit addictive substances not only hurt them physically and psychologically, but also induce criminal offenses. There are many researches revealing that the earlier the substance abuse prevention may decrease the drug adoption rate of the adolescents. For confirming the application of theory of planned behavior on adolescent's substance abuse, we select students in Mai-Liao for self-administration questionnaires, where belongs to the highest prevalence area of drug offenses in Yunlin county of middle Taiwan. After stratified, random, cluster sampling, 283 students of 5th-6th grade were enrolled. The collected data was treated by the structural equation model. The tests of

overall model fit and fit of internal structural model are well. The findings indicate that relative advantage, complexity, compatibility are dominant factors in explaining the attitude of substance abuse; the primary and secondary referent groups are dominant factors in explaining the subjective norm of substance abuse; and self-efficacy and convenience are dominant factors in explaining the perceived behavioral control. The results also indicate that the attitude, subjective norm and perceived behavioral control are dominant factors in explaining behavior tendency of adolescent's substance abuse. This study draws upon the theory of planned behavior as the theoretical basis and empirical findings for a pragmatic explanation of key factors affecting substance abuse in early adolescence.

FP-101

Depression and Diabetes: The Complicated Co-Morbidity

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Background: Among the non-communicable conditions afflicting the population, depression requires special attention due to high prevalence and co-occurrence with diabetes. It has high negative impact on health-related-outcomes and quality-of-life of diabetics. It has been considered as modifiable risk factor for diabetes control and management, and is amenable to cost effective treatment. Objective of the study was to identify the factors associated with depression among type 2 diabetics.

Methodology: This is a hospital based case control study with 300 subjects in 1:2 ratio. All consecutive patients attending the hospital were screened with nine-item patient health questionnaire to assess depression and a pretested structured interview schedule was administered to assess socio-economic, behavioral and diabetes specific factors. Bivariate and multiple logistic regression analyses were done using SPSS software.

Results: Risk factors identified in bivariate analysis were female sex, living alone, less than high school education, smokeless tobacco use, physical inactivity, poor social support, poor dietary adherence and poor glycemic control. However, multiple regression analysis indicated poor glycemic control [OR=6.32;(3.08-12.98)], poor social support system [OR=7.11;(3.52-14.35)], poor dietary adherence [OR=6.08;(3.04-12.13)] and smokeless tobacco use [OR=2.01;(1.03-4.23)] are significant predictors of depression.

Conclusion: Depression was significantly associated with modifiable risk factors like socio-behavioral and clinical factors. Hence a holistic approach for identification and rectification of risk factors by those who care for diabetics is the need of the hour for healthy living.

FP-102

Cultural Dimensions of Depression in Bangladesh: A Qualitative Study in Two Villages of Matlab, Bangladesh

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This article reports the results from a qualitative study conducted in two villages of Matlab. Participants with history of depressive episode were selected from a previous survey. A case vignette was used to elicit local terms for depression, the perceived causes, impact and treatments. Hardly anyone recognized the term Bishonnota (literal translation of depression) used in past surveys. Most thought the vignette was about Chinta Rog (Worry Illness). Majority spoke of somatic symptoms. When explored further, they mentioned sadness and psychological complaints. Men felt it affected them more while women felt the opposite. Most associated Chinta Rog with poverty and social issues with impact on marriage, work, and education. They attributed the cause to thoughts and emotions resulting from social causes. Commonly suggested treatments were more income, better relationships, and tablets. Former health providers were often the first choice for help-seeking.

FP-104

Stress in a Workplace in Mongolia

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Aim: The aim of the our study is to determine of immune system changes workers on their jobs/hospital, legal and commercial organizations/.

Method's: Level of stress of healthy peoples determined by questionnaire of Spielberg, in peripheral blood serum cortisol interleukin – 6 and tumor necrosis factor defined by the method of ELISA using monoclonal antibody's. Statistical analyses done by SPSS 10.0 for windows programme.

Result of study: Determined 21% of studied people had no stress; and 78% had stress; 47.6% with I degree, 18.1% with second degree, 13.2% with third degree. The average age of the people was 26-30+0.4; 42.2%, of them – male and 57.8% - female. 70 people with the second and third level of stress and 20 men with the 0 level stress were chosen for the immune test. The cortisol level in blood serum of people with stress has increased ($p<0.0001$) than the people who had no stress. It shows that IL-6 ($p<0.01$), TNF α ($p<0.05$) in the peripheral blood serum of people with stress has increased than the people in the control group.

Conclusion: 1) It can be concluded that 78.9% of workers in hospital, legal and commercial organizations feel stress in their workplaces; 2) The content of cortisol in the peripheral blood serums have been increased during the stress; 3) Increase of IL-6, TNF α cytokine in