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The Associated Factors of Insomnia among the Nursing Staffs in the Psychiatric Teaching Hospital ***Chien-Cheng Kuo^{1,2}, Ming-Shun Chung¹, Hsien-Jane Chiu¹, Pesus Chou²***

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Objectives: The goal of the study was to explore the associated factors of insomnia among the nursing staffs in the psychiatric teaching hospital.

Methods : The study is cross-sectional and 124 nursing staffs were screened by the questionnaires which include the variables of the demographic data, stressor, work situation, and sleep condition. The job stress is screened by the Chinese Version of the Job Content Questionnaire. The subjects were classified into insomnia by the Chinese-version of the Athens Insomnia Scale- eight questions (CAIS-8) with the impairment of mood or daily activity.

Results : 37.9 % of the nursing staffs met the criteria of insomnia. The significant associated factors of the insomnia by logistic regression were having the problem in couple issue (OR=3.96), the work years at the hospital (OR=1.22), having methods to relieve the tension (OR=0.21), the decision authority (OR=0.88) for increasing one score of the item, and the psychological demands (OR=1.14) for increasing one score of the item.

Discussion : The response rate of this study is 83.8%, so the data is representative for study target. The different kinds of stress management program may provide to the nursing staffs in high risk of insomnia, such as who have do not know how to relief tension, or deal with their couple relationship, or cope stress in work. The risk of insomnia increases with the work years at hospital. The speculation is that the senior nurses have more duty other than take care patients, such as playing a role in the administration, teaching and study, so they feel more stressful than the junior ones.

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Accumulated Copper and Zinc in Lettuce Plantation in Soil Amended with Bottom Ash Ratios ***Suthep Silapanuntakul¹, Prat Intraksit², Pisit Vatanasomboon¹, Kraichat Tantrakarnapa¹***

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This study was conducted to determine copper and zinc accumulation in lettuce planted in sida soil amended with lignite bottom ash under laboratory conditions. Nitrogen, phosphorus and potassium in sida soil, bottom ash and sida soil added with bottom ash, and the lettuce yield were also investigated. Five ratios of sida soil added with bottom ash were tested. One-way ANOVA and LSD were used for the data analyses.

Results indicated that mixed sample ratio 0.6:0.4 had the highest copper and zinc accumulation (26.13±2.30 and

137.74±4.13 mg/kg). Copper and zinc accumulation in mixed sample ratio showed significant difference as bottom ash ratio increased ($p<0.05$). The highest copper and zinc accumulation was found at ratio of 0.6:0.4 in lettuce root (21.46±5.90 mg/kg and 113.47±4.13 mg/kg), followed by lettuce leaf (8.18±1.20 mg/kg and 32.94±7.34 mg/kg). The accumulation in root and leaf of lettuce was significantly different as bottom ash ratio increased ($p<0.05$). The highest lettuce yield was found at both ratio of 0.8:0.2 and 0.6:0.4 with 1.43±0.06 and 1.43±0.03 gm/plant, respectively. A significant difference in lettuce yield with the increase of bottom ash ratio was observed ($p<0.05$).

The results suggest that lettuce leaf at all ratios are not harmful for consumers. The lettuce leaf at all mixed sample ratios did not exceed the heavy metal contamination according to the Criteria of Food and Drug Administration.

SP-135

Correlates of Occupational Stress among Operational Staff Employees in Domestic Commercial Banks in A District of Sri-Lanka

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Objective: To describe the correlates of occupational stress in operational staff employees of domestic commercial banks in the Colombo district.

Methodology: A cross-sectional descriptive survey was conducted among 733 operational staff employees in branches of commercial banks in Colombo district, proportionate to size of the operational staff strength, using cluster sampling technique. Validated, self-administered 22-item Sinhalese version of the Job Content Questionnaire assessed occupational stress categorized as high job strain and iso-strain according to demand-control-support model. Correlates were assessed using a 20-item self-administered questionnaire.

Results: Multivariate analysis showed that perceived anger due to work-related problems at home (OR=1.8; 95%CI 1.2-2.7), job insecurity (OR=2.0; 95%CI 1.3-3.1), lack of opportunities for promotions (OR=1.9; 95%CI 1.2-2.9), job dissatisfaction (OR=1.6; 95%CI 1.03-2.5), inability to cope with work stress (OR=2.0; 95%CI 1.4-3.0), delays in data processing (OR=1.5; 95%CI 1.002-2.1), age <35 years (OR=1.9; 95%CI 1.2-3.3) and marital status being unmarried, divorced or separated (OR=1.5; 95%CI 1.003-2.3) showed significant associations with high job strain ($p<0.05$).

Perceived anger due to work related problems at home (OR=1.8; 95%CI 1.1-2.9), perceived job insecurity (OR=2.7; 95%CI 1.65-4.4), perceived lack of opportunities for promotions (OR=3.5; 95%CI 1.95-6.2), perceived job dissatisfaction (OR=1.89; 95%CI 1.1-3.3),

perceived inability of coping work stress (OR=3.0; 95%CI 1.8-4.9), and service in the present bank ≤ 10 years (OR=2.5; 95%CI 1.48-4.2) showed significant associations with iso-strain ($p < 0.05$).

Conclusions: Career development correlates showed significant associations with high job strain as well as iso-strain among operational staff employees in the banks.

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Prevalence of Occupational Stress in Selected Categories of Employees in Domestic Commercial Banks in a District of Sri-Lanka

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Objective: To describe the prevalence of occupational stress among middle level managers and operational staff employees of domestic commercial banks in Colombo district.

Methodology: Two cross-sectional descriptive surveys were conducted among 353 middle level managers and 733 operational staff employees separately in branches of domestic commercial banks in Colombo district, proportionate to size of the staff strength, using cluster sampling. The validated, self-administered 22-item Job Content Questionnaire, assessed the prevalence of iso-strain and high job strain according to demand-control-support model.

Results: The prevalence of high job strain among operational staff employees was 24.4% (95%CI 21.5-27.3); [n=179] and it was significantly higher ($p=0.01$) than the prevalence of high job strain among middle level managers 17.8% (95%CI 15.1-20.5); [n=63].

The prevalence of iso-strain among operational staff employees was 14.5% (95%CI 12.1-16.9); [n=106] and it too was significantly higher ($p=0.04$) than the prevalence of iso-strain among middle level managers 10.2% (95%CI 8.1-12.3); [n=36].

High job strain among male and female middle level managers was 18.3% (95%CI 15.6-21.0); [n=40] and 17.2% (95%CI 14.5-19.9); [n=23] respectively and the difference between these two percentages were not statistically significant ($p > 0.05$). Iso-strain among male and female middle level managers was 10.5% (95%CI 8.3-12.7); [n=23] and 9.7% (95%CI 7.6-11.6); [n=13] while the difference was not significant ($p > 0.05$).

High job strain among male operational staff was 26.7% (95%CI 23.7-29.7); [n=92] and it was significantly higher ($p=0.04$) than the females 22.4% (95%CI 19.6-25.2); [n=87]. Iso-strain among male and female operational staff was 15.4% (95%CI 13.0-17.8); [n=53] and 13.6% (95%CI 11.3-15.9); [n=53] and the difference between the two percentages were not statistically significant ($p > 0.05$).

Conclusion: Operational staff employees perceived higher job strain as well as iso-strain than middle level managers in banks.

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Assessment of Usage and Disposal of Diapers among Caretakers of Children Under Two Years in Bangkok, Thailand

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This cross sectional study aimed to assess usage and disposal of diapers among caretakers of children in Bangkok, Thailand. The study was conducted in some communities in Bangkok from 30th January to 20th February, 2009 by accidental sampling. A total of 200 caretakers of children were interviewed. The findings of the study indicated that the respondents with good practice in diaper usage and disposal were 79.5% and 76.5% respectively. Approximately 73% of them were using disposable diapers and convenience was the main reason to use diapers. Only 10% of them had good level of knowledge on usage and disposal of diapers but only 6% of them had negative attitude towards diaper usage and disposal of diapers. Age of the respondents and age of the child were significantly associated with diaper use with p-value of 0.005 and 0.015 respectively. Sex of the respondents was associated with disposal of diaper (p -value=0.031). Attitude towards diaper disposal was associated with disposal of diapers (p -value = 0.009) while not associated with diaper usage. In conclusion, behavior change interventions to improve knowledge and attitude towards the diaper usage and disposal should be promoted among care takers.

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Plum Bum Level in the Air, Blood and Haemoglobin Level of Market Sellers in Ambon

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Market sellers who work in the streets have a big risk being exposed to plum bum. Plum bum in blood was influenced by plum bum level in the air, age, how long they work in the market, term of selling and smoking habit. The study objective was to analyze plum bum level in the air, blood and its effect to Hemoglobin level in market sellers in Ambon. Methods This research used a cross sectional design. Results There was a mean difference level of plum bum in the air at areas with many vehicles compared to areas with not so many vehicles. In addition, there was a mean difference of plum bum in the blood of market sellers in the area with many vehicles compared to area with not so many vehicles. There was also a mean difference of hemoglobin level in blood of market sellers in area with many vehicles. Level of plum bum in the air, how long