

SP-133

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.

SP-134

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),