

cases and suspect malaria and area mapping. Spatial analysis was used that were overlay and buffer method. The location for malaria transmission were inside and outside the house, either when individual or communal activities in the community. Within radius of 35.48 meters from the mean centre (398,680; 131,945.28) is mostly found malaria cases. Most cases were situated in the area of less than 400 meters in radius from breeding places. The potential breeding places in the area were in swamp areas and ponds or lagoons. Socio-demographic factors seems not to become a determinant factor for malaria, since cases were found in the early age to the eldest people and from well knowledge and high socio-economic to the lowest status in the areas. Malaria in coastal ecosystem was attacked to almost everybody, no matter how well the educational level, socio-economic status and occupation, as long as no fully protective malaria practiced among them. The spread of malaria were mostly within area of less than 400 meters from the breeding places.

FP-135

Lifetime Occupational History and Handgrip Measurement among the Rural Community in Pahang, Malaysia

Kin Wong Chan, Joo Qing Cheng, Ka Kiat Chin, Foong Ming Moy

University of Malaya, Malaysia

Occupational history is important in assessing mortality and morbidity of workers, while handgrip strength is an easily obtainable measure of physical health and muscle function. Our objective was to determine if handgrip measurement was related to occupational history and other related factors. A cross sectional study with a multistage cluster sampling was used. The stratification of the study population was done according to villages in each district. Each house in the villages acted as a sampling unit. The handgrip measurement was measured in kilograms among adults aged 30 years and above by using Jamar dynamometer. Sociodemographic characteristics, medical history, physical activity and occupational history were enquired using a pretested questionnaire. Anthropometric measurements and blood pressure were also obtained. SPSS version 16.0 was used for data analysis. There were 2197 respondents and 2069 (94.2%) subjects managed to complete the handgrip measurement. Majority of them (93.8%) were Malays. Half of them were in the age group of 40s and 50s. There were slightly more females than males. The mean right and left handgrip measurement was 25.5 ± 11.3 and 23.7 ± 11.0 respectively. Handgrip strength was significantly ($p < 0.05$) correlated with height and weight. Advancing age, female sex, underweight and obese groups were significantly associated with weaker handgrip strength ($p < 0.05$). Handgrip strength was also significantly greater ($p < 0.05$) in those currently working, once worked in the past, long working hours and those involved in physically demanding job sectors.

FP-136

Prevalence and Correlates of Occupational Stress in Middle Level Managers of Domestic Commercial Banks in a District of Sri-Lanka

Saik Suraweera¹, Rohinie De A Seneviratne², Hmmsd Herath³

1. Ministry of Healthcare and Nutrition, Sri Lanka

2. University of Colombo, Sri Lanka

3. Sri Lanka Medical Council, Sri Lanka

Objective: To describe the prevalence and correlates of occupational stress among middle level managers of domestic commercial banks in Colombo district.
Methodology: A cross-sectional descriptive survey was conducted among 353 middle level managers in commercial banks in the Colombo district, proportionate to size of the middle level manager staff strength, using cluster sampling technique. Validated, self-administered decision latitude, psychological job demands and social support at work scales of the Job Content Questionnaire assessed occupational stress using high job strain and iso-strain according to demand-control-support model. Workers with psychological demands more than the median with decision latitude less than the median were categorized as having high job strain and workers with high job strain with social support at work less than the median were categorized as having iso-strain. Correlates were assessed using a 20-item self-administered questionnaire.

Results: The prevalence of high job strain and iso-strain were 17.8% (95%CI 15.1-20.5) and 10.2% (95%CI 8.1-12.3). In the multivariate analysis, taking office work home (OR=3.4;95%CI 1.3-6.9), perceived job dissatisfaction (OR=7.8;95%CI 3.6-16.8) and shorter distance from residence to place of work (OR=2.3;95%CI 1.1-4.9) were found to be significant correlates of iso-strain while taking office work home (OR=2.3;95%CI 1.2-4.5), perceived job dissatisfaction (OR=3.3; 95%CI 1.8-5.9), and reduction of the time spent with the family (OR = 5.6; 95%CI 1.3-23.9) were significantly associated with high job strain.

Conclusion: Prevalence of iso-strain and high job strain among middle level managers was 10.2% and 17.8%. Perceived job dissatisfaction and taking office work home were found to be significant correlates of iso-strain as well as high job.

FP-137

Reliability and the Validity of the Sinhalese Version of the Job Content Questionnaire (JCQ)- A Study in Banking Employees in Commercial Banks in a District of Sri Lanka

Saik Suraweera¹, Rohinie De A Seneviratne², Hmmsd Herath³

1. Ministry of Healthcare and Nutrition, Sri Lanka

2. University of Colombo, Sri Lanka

3. Sri Lanka Medical Council, Sri Lanka

Introduction: Three selected major scales of the Job content questionnaire namely decision latitude, psychological job demands and social support at work have shown to be a valid and reliable tool to assess job stress in many occupational settings.

Objective: To assess the reliability and validity of the Sinhalese version of the selected three major scales of the JCQ among banking employees in Sri-Lanka.

Methodology: A nominal group procedure was followed to translate the original English version of the decision latitude, psychological job demands and social support at work, major scales of the Job content questionnaire into Sinhalese language. A Delphi process with experts from medical, occupational and psychology reached a consensus on face and content validity of the three selected major scales. A random sample of 225 middle level managers and operational staff employees in domestic commercial banks in Gampaha district was given the 22 item survey questionnaire to assess construct validity by exploratory factor analysis with Varimax rotation. Reliability was assessed by using Cronbach's alpha for internal consistency.

Results: Cronbach's alpha coefficients for decision latitude (0.71), social support at work (0.8) and psychological job demands (0.61) were within the accepted limits. Exploratory factor analysis showed six meaningful factors that could explain the three theoretical dimensions of Karask's demand-control-support model.

Conclusion: Sinhalese version of the three selected major scales of the JCQ are reliable and valid for assessing occupational stress in banking employees in Sri-Lanka.

FP-138

Solid Waste Segregation Promotion Program in Srirakul Vittaya School, Thailand

Prasert Makkaew, Weerapong Lerdrattanathewee, Saowalak Muangsri

Walailak University, Thailand

Objective: To implement solid waste segregation promotion program (WSPP) in Srirakul Vittaya School, Thailand and to study the difference of sample group's knowledge, attitude and practice (KAP) towards solid waste segregation before and after WSPP.

Methods: The samples were 192 students in Srirakoolvittaya school. The KAP questionnaire was used as an instrument in this study. The difference of sample group's KAP towards solid waste segregation before and after WSPP was analyzed by statistically with paired t-test.

Results: The average quantity of solid waste in each day was 48.43 kilograms which classified into 4 types as general waste, vanished waste, paper, and plastic which was 22.66%, 35.92%, 15.76%, and 25.66%, respectively. After WSPP, the average quantity of solid waste in each day was 47.64 kilograms. The solid waste was classified to 4 types as general waste, vanished, plastic, and paper which were 43.67%, 29.75%, 17.42%, and

9.17%, respectively. Segregated plastic and paper were sold to junk shop which created outcome about 1,184 Bath/ month. Furthermore, the amount of solid waste which must be final disposed was decrease to 47.59%. The sample group's KAP towards solid waste segregation before and after WSPP had different with statistical significant at the level of 95%.

Conclusion: Solid waste segregation promotion program in school can reduce solid waste quantity to final dispose and created outcome to school. It is the alternative way for solid waste management in school.

FP-139

Identifying Determine Factors Related to Unsafe Act/Substandard Practices at Rig Process, in X Company, Pekanbaru, Riau, Indonesia, 2009

Muthia Ashifa

University of Indonesia, Indonesia

In rig process, there are 7 type of hazards; chemical, biological, physical, ergonomic, psycho-social, kinetic, and mechanic. Still, with the high potential of risk and accident, it was found that many of the workers acting (behave) unsafely while doing their job. Such as; using improper equipment, not using personal protective equipment, horseplay. Related to Heinrich Theory (1931), 88 % of accident is caused by unsafe act and 10 % unsafe condition. DuPont (1988-1998), said that 96 % of accident is caused by unsafe act. Based on the fact that was found in workplace, the objective of this research is to identify what is the determining factors, related to unsafe act/substandard practices at rig process, in X company. This research concerns about related factors to unsafe act/substandard practices at rig process, in X company. It focus on personal and job factor (basic causes) Still, based on Domino theory, the first domino, which is lack of control (management system), is the main cause of the sequence of unsafe act/substandard practices. This is a qualitative research, using primary data (observation, interview based on International Safety Rating System and International Environmental Rating System), and secondary data (documents treasure, such as Standard Operating Procedure (SOP), Job Safety Analysis (JSA)) at rig process, in X Company. As the results, there are 5 main factors that related to unsafe act/substandard practices at rig process; social economy factor, knowledge factor (related to training quality), equipment/property factor, supervision factor, and management factor.

FP-140

Analysis of Dyslipidemia as Risk Factor of Hearing Loss in Mining Employees at District of Nuha, Luwu Timur Regency, South Sulawesi, Indonesia

Arsunan Arsin, Ekafadly Jusuf

Hasanuddin University, Taiwan