Poster presentation

ASBESTOSIS AND EXPOSURE LEVELS IN A CHINESE ASBESTOS WORKER COHORT
Xiaorong Wang, Mckri N Couture, Shiao Lin, Hong Qiu, Ignatius TS Yu. The Chinese University of Hong Kong, Hong Kong, China
10.1136/oemed-2014-102362.178

Objectives To assess the relationship between quantitative exposure levels and the development of asbestosis in a Chinese asbestos worker cohort.

Method A cohort consisting of 577 male workers from an asbestos products factory in China was followed for 37-years. Personal information was collected, including date of hire, specific job types, duration of exposure, and smoking habits. There were 127 workers (22%) diagnosed as asbestosis by a specialised panel using Chinese radiographic Diagnostic Criteria for Pneumocystis (GB5908–86). Individual cumulative fibre exposures (f-years/ml) were estimated based on periodic dust/fibre measurements from different workshops and years of working at specific workshops, and then categorised into four levels (quartile). The relationship between the exposure levels and cumulative incidence of asbestosis was assessed with Cox Proportional Hazard Model, adjusting for age and smoking.

Results Workers at the four exposure levels were comparable in age at entry, exposure duration (around 25 yrs), and smoking rate. However, the proportion of asbestosis cases was greater with exposure levels, accounting for 9%, 27%, 29% and 36% from 1st quartile to 4th quartile, respectively. Hazard ratios for cumulative incidence of asbestosis showed a clear trend with the exposure levels, with a nearly three-fold increase (3.42. 95% CI 2.0, 5.9) at the highest exposure level, compared to at the lowest level.

Conclusions The study using quantitative estimate of exposures, which was seldom available in China, provides additional evidence for the exposure-response relationship between chrysotile exposure and the development of asbestosis in asbestos workers.

THE IMPORTANCE OF CONDUCTING REGULAR SAFETY INSPECTIONS IN SMALL AND MEDIUM SIZE ENTERPRISES
Behdin Nowrouzi, 1, Basem Gohar, 2Behnam Nowrouzi, 3Maryna Garbaczewska, 4Olena Chapovalov, 5Lorraine Carter. 1 behavior Nowrouzi, 1,2Basem Gohar, 3Behnam Nowrouzi, 3Maryna Garbaczewska, 4Olena Chapovalov, 5Lorraine Carter. 1National Institute for Occupational Safety and Health, Cincinnati, OH, USA; 2Behavioral and Social Research Laboratory, University of Houston, Houston, TX, USA; 3Laurentian University, Sudbury, Canada; 4Center for Research in Occupational Safety and Health, Sudbury, Canada; 5Nipissing University, North Bay, Canada
10.1136/oemed-2014-102362.179

Objectives A considerable effort has been made to examine the health and safety of employees in large-sized enterprises. However, there has not been much attention given to the organisational work ability, and 2) nursing occupational stress, QWL, and various demographic factors in nurses are associated with work ability.

Method This cross sectional study was conducted in 2012 in four hospitals in northeastern Ontario, Canada. A stratified random sample of registered nurses (n = 111) were selected.

Results The majority of participants were female (94.6%) ranging in age from 24 to 64 years (M= 41.9, s.d.=10.2). For the stress and QWL model, one variable: QWL (home-work support) (p = 0.015), cross-trained nurses (p = 0.048), and having more than 4 patients per shift (p = 0.024) significantly contributed to the variance in work ability scores. In the logistic regression model, the odds of a higher work ability for nurses who received home-work support were estimated to be 1.32 (95% CI, 1.06 to 1.66) times the odds of a higher work ability for nurses who did not receive home-work support.

Conclusions Work ability in the work environment of obstetrical nurses is important. To be high functioning, workplaces should maximise the use of their employees’ actual and potential skills.

ASBESTOS WORKER COHORT
1Robert Schinke, 3Diane Belanger-Gardner. 1Robert Schinke, 3Diane Belanger-Gardner. 1National Institute for Occupational Safety and Health, Cincinnati, OH, USA; 2Behavioral and Social Research Laboratory, University of Houston, Houston, TX, USA; 3Laurentian University, Sudbury, Canada
10.1136/oemed-2014-102362.180

Objectives To assess the relationship between quantitative exposure levels and cumulative incidence of asbestosis showed a clear trend with the exposure levels, with a nearly three-fold increase (3.42. 95% CI 2.0, 5.9) at the highest exposure level, compared to at the lowest level.

Conclusions The study using quantitative estimate of exposures, which was seldom available in China, provides additional evidence for the exposure-response relationship between chrysotile exposure and the development of asbestosis in asbestos workers.

WORK ABILITY AND WORK-RELATED STRESS: A CROSS-SECTIONAL STUDY OF OBSTETRICAL NURSES IN URBAN NORTHERNONTARIO
1Olena Chapovalov, 5Lorraine Carter. 1Olena Chapovalov, 5Lorraine Carter. 1Northern Ontario School of Medicine, Sudbury, Canada; 5Nipissing University, North Bay, Canada
10.1136/oemed-2014-102362.181

Objectives Policing is considered a high-stress occupation and officers have elevated cardiovascular morbidity and mortality. We evaluated the association between salivary cortisol response to a standardised challenge and the metabolic syndrome (MetSyn), an indicator of increased cardiovascular risk.

Method Cross-sectional data from the Buffalo Cardio-Metabolic Occupational Police Stress Study (2004–2009) were analysed. MetSyn was defined as three or more of five components: abdominal obesity, hypertension, elevated triglycerides, reduced high-density lipoprotein cholesterol, and glucose intolerance. Officers provided five salivary cortisol samples, one before challenge (ingestion of a high-protein shake) and four at 15-minute
AN EPIDEMIOLOGY OF TRAFFIC ACCIDENT IN NORTHERN THAILAND
Tawatchai Apidechkul, Mae Fah Luang University, Chiang Rai, Thailand
10.1136/oemed-2014-102362.182

Objectives A cross-section study design aimed to explain the characteristics of traffic accident cases in northern of Thailand. Method A cross-section study design aimed to explain the characteristics of traffic accident cases in northern of Thailand. The subjects were recruited from 8 hospitals and 7 police stations in the highest case accident areas from hospitals and police stations during 2009-2012. All medical records and police statements were used as the sources of data collection. All research procedures were approved by the committee for the protection of human subjects of Mae Fah Luang University.

Results Totally 35 925 cases had been recruited into the study from 8 hospitals during 2009-2011. 66.58% were female, 28.01% aged 16-25 years old, and main vehicle was motorcycle (78.85%). 29.31% of subjects had been admitted at the hospital, 28.01% aged 16-25 years old, 67.29% had their accident on the highways, and 60.66% had accidents on the day time (06.00 am.-06.00 pm.), and those 13.12% drank alcohol. Univariate analysis showed that alcohol use, types of vehicle, medical cost, and medical surgery were statistical different between sex.

In 7 police stations, 2339 cases had been recruited into the analysis. 71.43% were females, 27.61% were aged 16-25 years old, 60.96% were married, 92.02% were Buddhism. The main type of vehicle was the cars (56.60%), 67.29% had their accident on the highways, and 60.66% had accidents on the day time (06.00 am.-06.00 pm.), and those 13.12% drank alcohol.

Conclusions Thailand needs the specific study for improving driving safety behaviours and also an effective regulation to control for traffic accident.

EVALUATION OF THE PREVALENCE OF URINARY INCONTINENCE SYMPTOMS IN ADOLESCENT FEMALE SOCCER PLAYERS AND THEIR IMPACT ON QUALITY OF LIFE
1Antonio Fernandes, 2Fatima Fitz, 3Alexandre Silva, 4Eduardo Filoni, 5José M Filho. 1University of Mogi Das Cruzes, Mogi Das Cruzes, São Paulo, Brazil; 2Cruzeiro Do Sul University, São Paulo, São Paulo, Brazil; 3State University of Campinas, Campinas, São Paulo, Brazil

Objectives To evaluate the prevalence, reliability and severity of symptoms of urinary incontinence (UI) in adolescent female soccer players and the impact of those symptoms on quality of life. Method The present work is a cross-sectional study of 59 female adolescents divided into a group of athletes, which included 35 adolescent amateur soccer players aged between 12 and 19 years (15.6 ± 2.0), and a control group, which included 24 adolescents aged 11 to 19 years (14.8 ± 2.4) who did not practice any sports. The International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF), the pad test and King’s Health Questionnaire (KHQ) were used for evaluation.

Results The athletes displayed 62.8% positivity the pad test and the ICIQ-SF, whereas the control group exhibited 25% positivity. A medium agreement of 0.45 was found between the applied evaluation scales, as assessed with Cohen’s kappa coefficient. In terms of quality of life (as assessed with the KHQ), the athletes exhibited a score of 35.2 in the General Health domain, 37.3 in the Emotions domain and 26.5 in the Sleep/Energy domain.

CONTRIBUTION TO THE PREVENTION OF OCCUPATIONAL STRESS
Kandouci Chahrazed, Belhad Zoubida, Baraka Fathia, Kandouci Baderdine Abdelkrim. University of Sidi Bel-Abbes, Sidi Bel-Abbes, Algeria
10.1136/oemed-2014-102362.183

Objectives The objectives of this study were to assess the importance of the mental suffering of employees in the service sector of a city in western Algeria and to identify risk factors and moderators of this suffering in order to develop an effective prevention. Method Standardised questionnaires were subjected to 753 employees in the tertiary sector. These questionnaires include three categories: A social and professional record (21 items), Maslach Burn Out Inventory: MBI (22 items), Job Personal Interaction Scale: JPIS 35 questions on the perception of the work environment by the individual divided into 6 rubrics (workload and unpredictability, control, rewards, recognition and fairness at work, social support, conflicts and perceived value valur/work and training). The data collected were anonymous and confidential. Data analysis was performed using SPSS (version 17.0). Univariate analysis was performed (chi-square Pearson correlations and a multivariate analysis (logistic regression). Results The state of burn-out was 23.6% after logistic regression the main social determinants of psychological distress in the overall sample one taking medication to relieve pain (p = 0.0002) remained significant. Regarding the determinants “professional” contact with the public and strong mode part of work were significant respectively (p = 0.0017 and 0.0042).

Moderators of stress for the multivariate analysis recognised two subscales of bad training (p < 0.01) and conflicts of values and perceived value (p = 0.02).

Conclusions Preventive actions to reduce or eliminate risk factors directly affect the environment and source of work: training more relevant, better organisation of work, especially the riding tasks and recognition of work done.