

shorter average actual sleeping time than no visual fatigue ($p < 0.05$), and the visual fatigue could be a predictor to average actual sleeping time.

Conclusions Health surveillance for VDU workers should include not only visual fatigue, but also extra-ocular symptoms, especially in upper limb disorders, and sleep problems. Designing better work-rest schedule and ergonomic workplace may be the preventive strategies at this workplace. Future research with a longitudinal study design is needed to study the psychosocial stress, productivity effects after visual fatigue on VDU workers.

154 ASSOCIATION BETWEEN LIFESTYLE BEHAVIORS AND BODY WEIGHT CHANGES IN MIDDLE-AGED TAIWANESE MALE WORKERS: A 5-YEAR OBSERVATIONAL COHORT STUDY

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Objectives To investigate association between lifestyle factors and 5-year body weight gain among apparently healthy middle-aged male workers.

Methods A occupational cohort in an electronic-manufacturing factory was established by using a medical checkup program in 2002, and was followed up with a health examination in 2007. Baseline comprehensive questionnaires were applied for collection of lifestyle behaviours, and abdominal ultrasound was performed for evaluation of hepatic steatosis. Male worker with complete data of baseline lifestyle factors, and laboratory examination, including ALT, ferritin, were included in analysis. Cross-sectional analyses in 2002 were conducted by stepwise multiple linear regressions for exploring significant association between lifestyle factors and log-ferritin. Stepwise linear regression models for 5-year body weight gain were used for identifying significant lifestyle factors with predictive value.

Results A total of 1096 male workers with a baseline mean (SD) age of 32.5 (6.0) were included for analysis. Log-ferritin was positively associated with red meat intake, and negatively associated with blood donation, regular exercise at leisure time, and vegetarian diet. 5-year body weight gain was associated with 12-hour shift work, and vegetarian diet after adjustment for age. In subgroup analysis among overweight males ($BMI > 25$) with non-alcoholic steatohepatitis (NASH), blood donation was significantly associated with less body weight gain in 5 years.

Conclusions 12-hour shift work, vegetarian diet may increase body weight in male workers. behaviours of health promotion, such as blood donation, regular exercise at leisure time, were associated with lower level of ferritin, a marker of total body iron load. Blood donation was the strongest factor associated with lower body weight gain within 5 years, especially among males with NASH. Physicians should recognise related behavioural factors for hyperferritinemia and body weight gain, and give high-risk individuals health counselling based on personalised risk profiles.

155 INDICATORS TO SURVEILLANCE THE HEALTH OF NURSING STAFF

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Objective Nursing morbidity profile has changed according to the working conditions. The profile that was composed of needlestick injuries and infectious diseases a few decades ago has nowadays become prevalent for musculoskeletal disorders. Knowing the health indicators of these workers is an essential tool to implement strategies to promote their health and monitor them. The aim of this study was to analyse health indicators related to nursing work, according to the institutional determinants and health problems.

Methods The study is characterised as epidemiological descriptive, cross-sectional and retrospective, and it was conducted in seven university hospitals in Brazil, in a universe of 44. From 2008 to 2009, information about the health problems of nursing staff-related work was sent by hospitals to researchers. The "System for Monitoring the Health of Nursing Workers (SIMOSTE)", that is an online system to capture data was used. For data analysis descriptive statistics was used. After the data analysis the System allows to verify the 13 proposed indicators.

Results The indicators highlight regional disparities of the country. The indicators related to the work dynamics show, on average, that nursing staff represent 38.4% of the health team of the hospitals, nurses represent 21.8% of nursing team, and the ratio of 2.4 nursing staff per bed was found. Considering the indicators related to exposure to workloads and strain processes, the most often are the physiological workloads ($RR = 43.8$), biological ($RR = 29.5$) and psychic ($RR = 26.5$); the health problems reported were musculoskeletal disorders (21.5%), trauma, and external causes (13%), mental and behavioural disorders (8.3%). The indicator that relates the consequences show that in one year were registered more than 8,000 days lost at work.

Conclusion In synthesis, these indicators will allow the accompanying of effectiveness of the preventive measures adopted by the hospitals and the improvement of working conditions.

156 WORKPLACE OCCUPATIONAL HEALTH INFORMATION

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Objectives An information system on occupational hazards, injuries and near misses as well as disease and associated risk factors and prevention measures needed and/or implemented is essential for any large employer to effectively manage and mitigate injuries and diseases in work place. The information provided by a system is only as good as the information entered to the system thus staff attitude towards the system and surveillance is important to ascertain for the program to work effectively

Method A 15% stratified random sample of employees was selected to participate in the baseline online survey. The questions covered incidents, workplace hazards and employee health. The employees were contacted via email with regular reminders to participate.

Results There were 314 participants giving a 32% response rate. 23% of employees did not know or were unsure how to contact their safety health and environment officer. In the past 5 years 9% of staff have suffered needlesticks and the majority (65%) reported the incident to both their supervisor and their health and safety representative. A few reported to a colleague or first aid provider and only 1 did not report. With other occupational injuries and diseases the patterns were the same. 60% of staff have received all three doses of the Hepatitis B vaccine and 26% received flu vaccines.