

“skill utilisation” and “physician-nurse relation” determined work-engagement.

Conclusions A slightly higher number of Belgian doctors suffered from burnout compared to previous studies, yet also showed work-engagement. Further analysis on determinants will be conducted as a base for preventive measures and actions to improve work-engagement.

374 NIGHT SHIFT WORK AND PROLACTIN IN NURSES AND MIDWIVES - PRELIMINARY RESULTS

A B Bukowska, Peplonska, Sobala. *Nofer Institute of Occupational Medicine, Lodz, Poland*

10.1136/oemed-2013-101717.374

Objectives Night shift work and exposure to light at night suppress synthesis of melatonin and disrupt circadian rhythm. The pattern of secretion of many hormones, including prolactin, is dependent on circadian rhythm and prolactin has been found to play a role in breast cancer aetiology. So far, the data on the link between night shift work and prolactin are sparse. The aim of our study was to evaluate the association between rotating night shift work and prolactin concentration in nurses and midwives.

Methods The cross-sectional study included 347 nurses and midwives currently working on rotating night shifts and 359 nurses and midwives working during the day. The prolactin concentration was measured in the morning blood samples using the ECLIA method. The associations were estimated by multiple linear regression models adjusted for: age, number of full-term births, current oral contraceptives use and time of blood collection. A potential modification by the menopausal status was analysed.

Results No difference in the prolactin concentration was found between the women currently working on night shifts and the day nurses (geometric means (GM): 195.3 U/ml vs. 194.7 U/ml; $p = 0.948$). In women with 2 or more consecutive night shifts within one week before the blood collection, we observed a statistically significant increase of the prolactin concentration compared to the women who had only one night shift throughout that week (250.2 U/ml vs. 216.9 U/ml; $p = 0.033$). None of the examined associations were modified by the menopausal status.

Conclusions The preliminary results of our study suggest that night shift work might modify prolactin secretion.

375 THE PREVALENCE OF LATEX SENSITISATION AND ALLERGY AND ASSOCIATED RISK FACTORS AMONG HEALTHCARE WORKERS USING HYPOALLERGENIC LATEX GLOVES SOUTH AFRICA

S M Phaswana, Naidoo. *University of KwaZulu Natal, Durban, South Africa*

10.1136/oemed-2013-101717.375

Objectives The present study describes latex sensitisation and allergy prevalences and associated factors among healthcare workers using hypoallergenic latex gloves at King Edward VIII Hospital in KwaZulu-Natal South Africa.

Methods A cross sectional survey of randomly selected healthcare workers ($n = 501$), (337 exposed and 164 unexposed) at King Edward VIII Hospital, South Africa was conducted between 2011 and 2012. Healthcare worker data was collected using a

questionnaire and skin prick tests using the Stallergenes kit. Chi-square and Kruskal-Wallis test were used for significance testing on bivariate analysis. Binary logistic regression was used to test associations between dependent and independent outcomes on multivariate analysis.

Results Prevalence of latex sensitisation and allergy observed among exposed workers (7.1% and 5.9%) and unexposed workers (3.1% and 1.8%). Work related allergy symptoms were significantly higher in exposed workers (40.9%, $p < 0.05$). Duration of employment was protective against latex allergy (OR: 0.9; 95% CI: 0.8–0.9). The risk of latex sensitisation (OR: 4.2; 95% CI: 1.2–14.1) and allergy (OR: 5.1; 95% CI: 1.2–21.2) increased with exclusive use of powder-free latex gloves. Dose-response relationship was observed for powdered latex gloves (OR: 1.1; 95% CI: 1.0–1.2). Atopy (OR: 1.5; 95% CI: 0.7–3.3 and 1.4; 95% CI: 0.6–3.2) and fruit allergy (OR: 2.3; 95% CI: 0.8–6.7 and 3.1; 95% CI: 1.1–9.2) also increased the risk of latex sensitisation and allergy, respectively. The observed relation between atopy and latex sensitisation and allergy was not significant.

Conclusion This study adds to previous findings that healthcare workers exposed to hypoallergenic latex gloves are at risk for developing latex sensitisation highlighting its importance as an occupational hazard in healthcare.

376 THE PREVALENCE, CIRCUMSTANCES AND REPORTING OF PATIENT/VISITOR-ON-WORKER (TYPE II) VIOLENCE IN 6 U. S. HOSPITALS

¹L P Pompeii, ²Schoenfisch, ²Dement, ¹Jones, ²Hester, ³Smith. ¹The University of Texas, Houston, United States of America; ²Duke University Medical Center, Durham, NC, United States of America; ³St. Luke's Episcopal Hospital, Houston, Texas, United States of America

10.1136/oemed-2013-101717.376

Objectives We aimed to establish baseline measures of type II violence (patient/visitor-on-worker) and event reporting practices among workers in 6 U. S. hospitals. Findings from this survey will inform the development and implementation of a hospital violence surveillance system.

Methods An anonymous cross-sectional survey was administered to workers to examine their career and 12-month prevalence of being victims of workplace violence perpetrated by patients and/or visitors, as well as details about events that workers deemed the most serious.

Results Of the 5,312 hospital workers who responded, 49.4% and 38.9% reported a career and 12-month prevalence of type II violence, respectively. The total number of events in the prior 12 months included 1,100 physical assaults, 2,206 physical threats, and 5,676 verbal abuse events. More than half of the events were reported by nursing staff (36.7%) and patient care technologists (14.8%). Other workgroups not typically considered to be at risk also reported events including those in pharmacy, social work, food service, housekeeping, and patient financial services. Of the 2,098 most serious events in the prior year, perpetrators were more likely to be patients (76.1%) than visitors (23.9%). Factors that workers attributed to these events included patients' behavioural issues, being disoriented, being drunk, and visitors being unhappy with patient's care and long wait-times. A large proportion (75.0%) of workers indicated they reported the event; however, only a small proportion of those (26.2%) did so through a formal system (e.g., first report