order to enable the possibility of comparing results on an international basis.

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PREVALENCE AND RISK FACTORS FOR HAND ECZEMA AMONG NORWEGIAN SPECIALIST NURSES: A CROSS-SECTIONAL STUDY

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10.1136/oemed-2018-ICOHabstracts.970

Background Hand eczema (HE), the most frequent work-related skin disease, is common among health workers, but knowledge about its occurrence in Norwegian specialist nurses is scarce.

We aimed to investigate the prevalence of hand eczema and identify occupational and non-occupational risk factors among specialist nurses working at the Oslo University Hospital.

Methods A cross-sectional survey of 115 specialist nurses (surgical and anaesthetics) was performed by using an adapted version of the Nordic Occupational Skin Questionnaire (NOSQ 2002-Norwegian), which includes standardised questions for HE, occupational and non-occupational exposures. Analyses comprised descriptive statistics and logistic regression (STATA 14).

Results The participation frequency was 99.1%. Nearly three-quarters of the participants reported skin symptoms during the last 12 months. The lifetime prevalence, one-year prevalence and point prevalence of HE was 27.19%, 17.54%, and 11.40%; the prevalence of work-related HE was 14.9%. Although HE was more common in women, we did not find an association between sex and HE. Age, childhood eczema, and amount of years working as a specialist nurse were consistent predictors for work-related HE. Time spent using protective gloves did not predict work-related HE, but self-reported skin symptoms when using protective gloves was a consistent predictor. The most common aggravating factors at work comprised hand cleaning and disinfection, water and winter season. Domestic exposures (food preparation, cleaning/washing, care for children under 4 years, contact with animals) did not predict either HE or work-related HE.

Conclusion The one-year prevalence for HE was almost twice, and for work-related HE was nearly thrice than in the general population. The occurrence of work-related HE was associated with older age, childhood eczema, amount of years working as specialist nurse, and skin symptoms when wearing protective gloves. A potential healthy worker survivor effect may underestimate the prevalence figures and associations reported here. Prevention strategies focusing on skin care and protection should be developed for specialist nurses.

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UPPER EXTREMITIES STRAIN ASSESSMENT IN NURSING PERSONNEL

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10.1136/oemed-2018-ICOHabstracts.971

Introduction Besides work-related low back pain, disorders of neck-shoulder-arm area have also become increasingly common amongst nursing personnel. Analysis of working postures according to OWAS method demonstrated that more than 25% of the working time the abduction of the upper limb was between 30 and 90 degrees. At that point ergonomic measures should be considered. This study was conducted to determine whether different bed positions effect deltoid muscle activity during nursing tasks.

Methods Seven nurses in a geriatric nursing home participated in the study. Surface electromyography was used to assess local strain of the deltoid muscle during standardised morning care routine of immobile patients. Each participant conducted measurements with four different bed conditions: 1. recommended bed height according to the anthropometric characteristics with side rails up; 2. recommended height with side rails down; 3. recommended height lowered by 10 centimetres with side rails up; 4. lowered height with side rails down. Statistical analysis was performed on the basis of non-parametric Wilcoxon matched pairs test. The value $p < 0.05$ was considered to be statistically significant.

Result There were no statistically significant differences between all four cases. Deltoid muscle activity was neither influenced by the height of the bed ($p = 0.078-1.00$) nor by the positions of the side rails ($p = 0.047-0.33$).

Discussion Differences in bed height or the position of the side rails did not result in significant change of deltoid muscles activity. Therefore, further ergonomic evaluations need to be considered to determine the true origin of shoulder discomfort and why upper limb postures are above critical ergonomic values amongst nursing personnel.

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FEASIBILITY AND ACCEPTABILITY OF A WORK-BASED COLORECTAL CANCER SCREENING INITIATIVE IN FLORIDA FIREFIGHTERS

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10.1136/oemed-2018-ICOHabstracts.972

Introduction Colorectal cancer (CRC) has been identified as one of the top diagnosed cancers among firefighters in Florida, United States. Firefighters are routinely exposed to highly toxic materials, many of which have been linked to an increased risk for colorectal cancer. Despite the elevated risk, cancer screening behaviours of active firefighters are unknown. We assessed the feasibility, acceptability, and implementation of a worksite-based cancer screening program using faecal immunochemical testing (FIT) among unscreened and under-screened Florida firefighters.

Methods In collaboration with Florida fire departments, participants were recruited through their fire department. All participants completed an eligibility screener, informed consent and demographic questionnaire. Firefighters subsequently received a FIT kit in-person or via mail and returned specimens to the lab for testing. Screening results were reported to participants via telephone and those who screened positive were referred for colonoscopy.

Result Collectively, 1611 firefighters were screened for eligibility of whom 525 (32.6%) were eligible. Ineligible firefighters