

## Poster Presentation

## Psychosocial

0110 THE ASSOCIATION BETWEEN PSYCHOSOCIAL FACTORS AND NEEDLESTICK INJURIES AMONG NURSES WORKING IN DIFFERENT HEALTHCARE SETTINGS

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**Objective** To understand the psychosocial effects of needlestick injuries (NSIs) among nurses working in different healthcare settings.

**Method** A total of 5535 fulltime registered nurses (RN) working among secondary referral hospitals (SRH) or primary clinics (PC) were recruited between 2009 and 2010. A structured self-administered questionnaire was used to assess nurses' psychosocial working conditions and their experiences of NSIs. The psychosocial working conditions were assessed by the Chinese Job Content Questionnaire and a workplace justice scale. The NSIs were assessed by asking nurses' experiences of NSIs in the past 12 months. Multivariable logistic regression was used to analyse the associations between psychosocial factors and NSIs.

**Results** A total of 1032 and 1020 eligible questionnaires for SRH and PC nurses were included for final analysis. The incidence rate of NSIs was 15.2% for SRH nurses and 19.9% for PC nurses. Shift work (AOR: 1.8, 95% CI: 1.2, 3.0) and high psychological demands (AOR: 1.5, 95% CI: 1.0, 2.1) were identified as risk factors of the annual incidence of NSIs among SRH nurses, whilst the risk factors of the annual NSIs included low job control (AOR: 1.4, 95% CI: 1.0, 2.0) and low workplace justice (AOR: 1.6, 95% CI: 1.1, 2.4) among PC nurses.

**Conclusion** This study identified that the psychosocial factors of nurses' NSIs varied across different healthcare settings. Specific strategies for different healthcare settings to prevent nurses' NSIs are warranted.

## Oral Presentation

## Shift Work

0111 THE ASSOCIATION BETWEEN WORK SCHEDULE CONTROL AND NURSES' BURNOUT IN TAIWAN

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**Background** Shiftwork and long work hours have been reported as significant risk factors for nurses' burnout. In addition, whether nurses have ability to *control* their own *schedule*, such as having options and decision over swapping shifts or taking unpaid leave, remain lacking.

**Objective** To examine the associations between nurses' work schedule control (WSC) and their effect on burnout.

**Method** A total of 3431 fulltime registered nurses working in the hospital were systematically sampled in 2013. A structured self-administered questionnaire was performed to assess nurses' WSC, work schedule demands (WSDs) and their effect on burnout. The WSC was assessed by asking nurses' experiences of requesting leave. Personal and client burnout status were measured using the Chinese version of the Copenhagen Burnout Inventory. Multivariable logistic regression was used to analyse the associations between nurses' WSC and their effect on burnout. The WSDs, including shiftwork patterns and average weekly working hours, were controlled.

**Results** A total of 2631 questionnaires were eligible for final analysis. Only 5% of participants experienced unrestricted leave. After adjusting for demographic data, both average weekly working hours and unrestricted leave were significantly associated with nurses' personal and client burnout. Nurses exposed to rotating shift work were more likely to experience client burnout.

**Conclusion** This study identified that work schedule control (WSC) was related to personal and client burnout among hospital nurses. Hospitals wishing to proactively *reduce nurses' burnout* may permit more unrestricted leaves when requested by the staff nurse.

## Poster Presentation

## Musculoskeletal

## 0112 WORK ENVIRONMENT AND HEALTH IN DENMARK – RISK FACTORS RELATED TO PHYSICAL WORK DEMANDS FOR LONG-TERM SICKNESS ABSENCE

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In 2012, more than 20 000 people of the general working population in Denmark replied to the questionnaire Work Environment and Health. The aim of the present study is to prospectively analyse risk factors for long-term sickness absence related to physical work demands. The questionnaire from 2012 will be merged with a register of social transfer payment (DREAM) and followed up for two years after the questionnaire reply. Using cox-regression analyses, the risk of register-based sickness absence of at least 6 consecutive weeks from factors related to physical work demands will be determined. Analyses will be controlled for age, gender, lifestyle, psychosocial work factors, and socio-economic status. The questionnaire and register has just been merged, and the analyses will be performed during April-June of 2017. The first results of this study will be presented at the conference as hazard ratios and 95% confidence intervals. Based on the results, the potential for preventing long-term sickness absence at workplaces will be discussed.

## Poster Presentation

## Psychosocial

## 0113 STABLE PREVALENCE OF WORKPLACE BULLYING AMONG NORWEGIAN DOCTORS: A STUDY BASED ON NATIONAL SAMPLES IN 1993, 2004 AND 2014

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**Objectives** To describe the changes in 12 months prevalence of subjection to bullying at work for doctors in different job categories and medical disciplines from 1993 to 2014, and to find work and health-related factors associated with being subjected to workplace bullying for doctors in 2014.

**Methods** Nationwide postal surveys in Norway based on representative samples of 2628 doctors (72.8%) in 1993, 1004 (67%) in 2004 and 1261 (78.2%) in 2014. Main outcome measure was self-reported frequency of subjection to bullying at work from colleagues or supervisors within the last year. Response categories ranged from 1 (no) to 5 (daily or almost daily). Being subjected to bullying at work was defined as any answers above 1.

**Results** No significant differences were found in prevalence of subjection to workplace bullying in 1993 (5.7%, 95% CI 4.8–6.6), 2004 (7.3%, 5.4–9.2) and 2014 (7.0%, 4.5–8.5). Within job categories, the prevalence of being bullied were higher for

senior hospital consultants and doctors in hospital management position than for specialty registrars, GPs and private practice specialists. Within medical disciplines, surgeons reported higher prevalence. In 2014, being bullied was significantly associated with females (OR 0.49, 95% CI 0.29–0.85), lower levels of job satisfaction (0.92, 0.90–0.94) and self-rated health (average or poor OR 2.3, 1.2–4.3; good 3.5, 1.5–8.2; very good OR 1), controlled for age and sickness absence.

**Conclusions** Subjection to workplace bullying remained at stable high level for doctors in Norway over a 20 year period. The findings underline the need for bullying prevention among Norwegian doctors.

## Oral Presentation

## Occupational Medicine (SCOM/Modernet)

## 0114 COMPARISON OF COMPETENCY PRIORITIES BETWEEN UK OCCUPATIONAL PHYSICIANS AND NURSES

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**Objectives** The competencies required of occupational physicians (OPs) and occupational health nurses (OHNs) separately have been studied in various countries but little research has made direct comparisons between these two key OH professional groups. Evolving OH practice and overlapping OP and OHN roles make it imperative that up-to-date competencies reflective of practice are established. The aim of this study was to compare current competency priorities between UK OPs and OHNs.

**Methods** A modified Delphi study conducted among representative networks of UK OPs and OHNs. This formed part of a larger Delphi, including international OPs. It was undertaken in two rounds (round 1- 'rating', round 2- 'ranking'), using a questionnaire based on available OH competency guidance, the literature, expert panel reviews and conference discussions.

**Results** The principle domain (PD) competency ranks were very highly correlated (Spearman's rho=0.972; p<0.001) with the same PDs featuring in the top four and bottom three in ranking. OPs and OHNs ranked identically for the top two PDs (good clinical care and general principles of assessment and management of occupational hazards to health). Research methods was ranked lowest by both groups.

**Conclusions** This study has observed a high level of agreement among UK OPs and OHNs on current competency priorities. The 'clinically-focused' competency priorities likely reflect that although OH practice will broaden in response to various factors, traditional 'core' OH activities will still be required. These mutually identified priorities can serve to strengthen collaboration between these groups, develop joint education/training programmes and identify common professional development opportunities.