

Discussion Comprehensive guidance beyond patient handling policies and training is needed for prevention of work-related ULDs that address physical and psychosocial exposures. Work organisation changes such as increased control over work, scheduling and rest breaks emerge as simple interventions to manage physical and psychosocial exposures. Examples will be provided.

723 OCCUPATIONAL HEALTH HAZARDS, HEALTH PROBLEMS ENCOUNTERED AND PERSONAL PROTECTIVE EQUIPMENT USED IN HEALTHCARE WORKERS IN HOSPITALS, THAILAND

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Introduction Healthcare workers usually expose to chemical, physical, biological and ergonomic hazards in their everyday life. The objectives of this cross-sectional study are to evaluate chemical, physical, biological and ergonomic hazards and health problems of healthcare workers in hospitals, accidents, contact with chemicals and body fluids and personal protective equipment used among healthcare workers in Thailand.

Methods The self-administered and interviewed questionnaires were distributed or collected from healthcare workers proportion to size of five hospital staffs in five regions of Thailand.

Results Healthcare workers have been working very hard for 9 to 11 hours/day on average, including overtime work ranging 13–18 hours/day. More than half of the inpatient, surgery and anaesthesia, nutrition service department did shift work. Healthcare workers at nutrition service department reported highest musculoskeletal disorders, respiratory symptoms and hearing loss than other departments. In surgery and anaesthesia department, they reported highest skin problem due to highest chemical exposure and biological hazards; they exposed to radiation, vibration from equipment and tools, glare and inadequate lighting leading to eye irritation, eye pain and blur vision and reported highest non-specific symptoms. The regular compliance with safety rule and protocol of healthcare workers were not so high, inpatient (65.8%), outpatient (65.9%), surgery and anaesthesia (77.6%), nutrition service (78.4%) and hospital supporting service (66.9%). The regular correct working posture of them was not high either (51% or lower). Regarding hazard control and personal protective equipment provided in workplace, inpatient department reported highest, followed by surgery and anaesthesia, outpatient, nutrition service and hospital supporting service.

Conclusion The healthcare workers were exposed to many occupational health hazards, high risk of accidents, working very hard; they need more attention to reduce or control the occupational health hazards in the workplace.

74 CARDIOVASCULAR RISK FACTORS AND COMORBIDITIES IN HEALTH CARE WORKERS – IS THERE A GENDER DIFFERENCE?

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Introduction Health care workers experience the implications of health and disease every day, including the crucial role of health-damaging behaviour on morbidity and mortality. This study was conducted to analyse the health behaviour and comorbidities in health care workers with focus on gender differences.

Methods In this study we analysed the clinical data of n=273 health care workers (166 males, 107 females) who presented in our occupational medicine outpatient unit. The focus of this study was to assess cardiovascular risk factors, such as obesity, smoking, or physical inactivity as well as diseases of the musculoskeletal system and mental illness.

Result Female health care workers presented a higher trend of smoking in comparison to male health care workers (43,0% vs 32,5%). Furthermore, female health care workers showed significant less physical activity in comparison to their male colleagues (49,0% vs 71,8%, p>0,001). Musculoskeletal diseases were common in both groups (19,6% for female vs 18,1% for male), but mental illness was significantly more frequent in females (6,5% vs 0,0% for males, p<0,05).

Discussion Female health care workers need special consideration in the implementation of preventive measures to reduce health-damaging behaviour. The higher proportion of mental illness in female in comparison to male workers might be due to a selection bias.

740 SEASONAL INFLUENZA VACCINATION IN HEALTH CARE WORKERS AND STUDENTS. SURVEY IN A LARGE ITALIAN UNIVERSITY HOSPITAL

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Introduction Vaccination is an important measure for preventing influenza. Its importance in healthcare settings is twofold: it does not only protects Health Care Workers (HCWs) – possibly reducing disease-related work absenteeism and the consequent disruption of health services – but vulnerable patients too. The aim of the study was to evaluate the influenza vaccination coverage among HCWs and students in a large Italian university hospital.

Methods We collected data on influenza vaccination among HCWs and healthcare students in the period 2012–2016. Data included sex, age, work unit, and job title (HCWs)/degree course (students). We applied chi-square test and t-test for statistical comparisons. The level of significance adopted was 5%.

Result In the analysed period, a total of 2218 vaccines were administered, with a progressive increase from 302 (2012) to 659 (2016) per year (mean \pm SD: 444 ± 150). Focusing on 2016, 49.3% of the vaccinated subjects were students or residents, 42.0% HCWs, 7.0% administrative staff and 1.7% volunteers. Among HCWs, the mean age of the vaccinated subjects was higher than the mean age of all hospital staff (49.5 vs 45.9, p -value <0.05). Men were more vaccinated than women (12.3% vs 7.6%, p -value <0.05). The highest vaccination coverage was among medical doctors (21.3%), followed by administrative staff (8.7%), nurses and midwives (6.5%), and other healthcare workers (3.4%). Among students, the highest vaccination coverage was in medical students (33.2%), followed by nursing and midwifery students (8.2%), and other healthcare students (6.3%).

Conclusion In Italy, the increasing flu vaccination rates was likely due to the growing public concern regarding infectious diseases, particularly meningococcal meningitis. Older HCWs were the most vaccinated, probably because age and its related disorders raise awareness on the importance of vaccination. In this sense, they use vaccination in order to protect themselves. The higher vaccination coverage among doctors and medical students suggests an important influence of education.

78 HEALTHCARE WORKERS AND BLOODBORNE PATHOGEN EXPOSURE INCIDENTS

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Introduction Healthcare workers are at risk of infection caused by bloodborne pathogens, particularly hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV) due to sharps injuries and skin and mucous membrane contacts with blood or other potentially infectious materials. Our aim was to evaluate the reporting, management and consequences of bloodborne pathogen exposure incidents in healthcare workers.

Methods The study included all healthcare workers of the largest University Medical Centre in Slovenia (UMCL) who reported bloodborne incidents and were treated from 1 January 2008 to 31 December 2016 according to the guidelines. The data were collected from medical records.

Result The average number of employed healthcare workers was 5492. The mean incidence rate of annually reported and treated incidents was 2.22 per 100 health workers. Average annual injuries incidence rates were the highest at the Dental Clinic (9.83 per 100), Department of Surgery (2.86 per 100) and Department of Internal Medicine (2.25 per 100). Incidents occurred most frequently in nurse's aides (5.79 per 100), followed by doctors (2.28 per 100) and nurses (1.69 per 100). The most common were sharps injuries (1.93 per 100), followed by contact of eye (0.11 per 100) and skin (0.04 per 100) with blood. The most frequent cause was contact when disposing of used needles (39.83%). Incidents most commonly happened on Fridays. Approximately 81% of exposed workers were vaccinated against HBV before the incident. Among the reported cases, one became HBsAg positive after the incident, while none of them was anti-HCV or anti-HIV reactive during the follow-up.

Discussion More work-related interventions are needed to prevent bloodborne incidents among healthcare workers. Therefore, we are developing an educational campaign to raise awareness of the importance of prevention, reporting and treating bloodborne exposure incidents and vaccination against HBV.

797 THE JOB DEMAND-CONTROL-SUPPORT AND EFFORT-REWARD-IMBALANCE MODELS APPLIED ON SWEDISH HOSPITAL WORKERS IN THE OPERATION THEATRE

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Introduction There is a global shortage of healthcare workers. The aim of the present study is to describe the psycho-social work climate for hospital workers in the operating theatre via the job demand-control-support (JDCS) and effort-reward imbalance (ERI) models and relate to well-being, work-ability, zest for work and thoughts about leaving the job.

Methods Hospital workers in the operating theatre of 7 Swedish hospitals (n=1405, response rate 68%) received a questionnaire including the JDCS model, ERI model, personal factors, well-being, work-ability, zest for work and thoughts about leaving their job. Ordinal scale regression was used for analyses.

Results Descriptively a majority reported moderate to high zest for work (76%). A minority (30%) had sometimes thought of leaving their jobs for at least one month during the last year. Social support was positively related to well-being, zest for work and inversely related to thoughts about leaving the job. Workers reporting low well-being, poor zest for work and more thoughts about leaving the job scored at average in the active field of the demand-control diagram and operating nurses were the only category with mean scores in the strain field, in comparison to all personnel. Also relations to the ERI model will be presented (in progress by June 2017).

Discussion The social support dimension of the JDCS model was the main occupational factor related to well-being and positive thoughts about keeping the job. Lack of external comparison groups, small variability and poor internal consistency of the control index make conclusions about the demand-control dimensions less reliable.

824 THE DESIGN AND DEVELOPMENT OF A 'HUB AND SPOKE MODEL' FOR HEALTHCARE WORKERS IN THE PUBLIC HEALTH SERVICE IN IRELAND

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Introduction The Health Service Executive (Ireland) Mission clearly states that people in Ireland are supported by health and social care services to achieve their full potential. It identified access, safe, compassionate and quality care as priorities. The HSE Corporate Plan 2015–2017 set our values of Care, Compassion, Trust and Learning.