Session: F. Health care II

40 STRESS, ADVERSE PSYCHOSOCIAL RISKS AND FATIGUE EFFECTS IN MEDICAL RESIDENTS AT A HIGH SPECIALTY MEDICAL UNIT

C A J P Juarez Perez, LMH A Hernandez-Aguire, LH G Haro-Garcia, G A M Aguilar-Madrid, Mexican Social Security Institute, Distrito Federal, Mexico; Instituto Mexicano Del Seguro Social, Ciudad Juarez, Chihuahua, Mexico; University of Mexico City, Distrito Federal, Mexico

Objective The purpose of this study was identify the determinants of fatigue.

Methods A cross-sectional study in 153 medic residents volunteers from diverse specialties at a high specialty medical unit of the Mexican Institute of Social Security was conducted. Sociodemographic and job information were collected. The presence of stress, burnout, depression and fatigue were assessed, as well as unfavorable psychosocial factors, violence and quality of working life at risk. The model of fatigue stress determinants was adopted and a multiple logistic regression model for that purpose was completed.

Results 27% (153) took part. 61.4% referred depression and 50.3% mentioned loss interest for daily activities. From 28 to 74% pointed adverse psychosocial factors at work; 93.5% reported presence of violence. Of 8.5 to 89% had working life with poor conditions; 61.4% had stress, 63.4% fatigue, and 32.7% burnout syndrome. In multiple logistic regression model, stress, OR: 8.9 (95% CI: 3.4–23.2, p <0.001), burnout, OR: 3.4 (95% CI: 1.02–11.4, p = 0.045), psychological demands at work, OR: 4.2 (95% CI: 1.5–12.1, p = 0.007), and depression, OR 2.9 (95% CI: 1.12–7.7, p = 0.028) were identified as determinants of fatigue.

Conclusions The job stress persistence can lead to chronic fatigue syndrome, and this probably is affecting the quality medical care afforded.

41 PRE AND POST-VACCINATION PANDEMIC A(H1N1) PMD09 ANTIBODIES SEROPREVALENCE IN MEXICAN HEALTH WORKERS

GM A M Aguilar-Madrid, Juarez-Perez, Castelan-Vega, Ribas-Aparicio, Jimenez Alberto, Haro-Garcia, Estrada-Garcia, Sanchez-Román. Instituto Mexicano Del Seguro Social, Mexico, Distrito Federal, Mexico; Instituto Mexicano Del Seguro Social, Mexico, Distrito Federal, Mexico; Instituto Tecnico Nacional. Escuela Nacional De Ciencias Biologicas, Mexico, DF, Mexico; Instituto Tecnico Nacional. Escuela Nacional De Ciencias Biologicas, Mexico, DF, Mexico; Universidad Autonoma De La Ciudad-Cuauhtemoc, Academia de Salud Comunitaria, Mexico, DF, Mexico

Objective To identify seropositivity for influenza A (H1N1) pdm09 in Social Security Mexican Institute (IMSS) health staff in the Valley of Mexico.

Methodology Two stages cross sectional study was conducted on a random sample of pre-vaccination and post-vaccination against pandemic virus IMSS workers from Valley of Mexico and by job category. A social and labour questionnaire was applied and presence of antibodies against influenza A (H1N1) pdm09 in serum was identified. Seropositivity of antibodies against pandemic virus was intermediate (27%) so, between 67% and 73% of them continued to be susceptible to infection with influenza pandemic. Given the relatively low seropositivity induced by vaccine, is imperative to adopt and put into practice in permanent basis, hygienic and safety measures on health staff and populations under risk, and develop a permanent epidemiologic surveillance program over Mexican health system workers.

42 ROTATING NIGHT SHIFT WORK AND HEALTH STATUS AMONG NURSES AND MIDWIVES

W B Burdelak, Pępłonska, Bukowska, Kysycka. Nafer Institute of Occupational Medicine, Lodz, Poland

Objective Night shift work has been linked to several chronic diseases such as gastrointestinal disorders, cardiovascular disease and diabetes, although the epidemiological data for rotating night shift nurses are inconclusive. The aim of our study was to assess the prevalence of selected diseases and symptoms among nurses and midwives according to their current system of work and the history of night shift work.

Methods We performed a cross-sectional study of 725 nurses and midwives (354 working on rotating night shifts and 371 daytime workers). Data were collected via an in-person interview, according to the “Standard Shiftwork Index”. The prevalence of particular diseases and symptoms were compared between the groups. The odds ratios were calculated with the logistic regression analysis adjusted for important confounding factors and they were calculated according to the frequency of...
night shifts in the current work schedule and the total duration of night shift work.

Results Chronic back pain, hypertension and thyroid disease were the most common diseases in the total population of nurses and midwives. The prevalence of thyroid disease was higher than in the general population of Polish women (21.2% vs. 10%) and the relative risk of this disease increased with increasing duration of night shifts work. The analysis did not show significantly higher frequency of any disease or symptom in the night shifts nurses compared to the day workers. The analysis showed significantly increased risk of feet swelling in women working 8 or more night shifts per month (OR = 8.55; 95% CI: 1.02–71.80).

Conclusions We did not find significant increased risk of any of the diseases or symptoms among night shifts nurses than among the women working only during the day. The increased prevalence of thyroid disease among the women with long duration of night shift work warrants further epidemiological studies.

Objective To determine the incidence of sharp pointed injuries by working category and its characteristics.

Material and Methods Information of sharp pointed injuries from 2004 to 2010 was collected using EPINet, which registered: working traits, service, description of the accident, object, and anatomical part among others.

Results We recorded 181 injuries, with a mean (SD) [min-max] of: age 38 (8.5) [18–56] years; length of service in the hospital 10.6 (7.7) [0.5–27] years. The greatest proportions of injuries were in the departments of: Adolescents 31.5%, NICU 25% and Operating Room 16%. The first working shift had the largest amount of accidents with 71.7%. Moderate lesions were the most frequent with 69%, followed by superficial 21% and severe 15%. Of all the personnel, 55% did not use gloves, 41% used one pair and 5% used double pair of gloves; 49% was injured in the right hand and 48.8 in the left hand. The main working categories injured were: nurses 48%, medical residents 23.2%, general services 16.6%, and physicians 6.6%. The incidences were: working traits 7%, service 16.6%, description of the accident 9%, object 21.2%, and anatomical part 57.6%.

Conclusions Medical residents are in greater risk of having sharp pointed injuries followed by nurses and general services. It is necessary to identify the causes and take preventive measures as well as developing permanent epidemiological surveillance of these risks.

Objective To describe the presence of Burnout syndrome among doctors in residency medical postgraduate and to evaluate in organisational ergonomics factors in the framework of a school hospital which predict that syndrome.

Methods Cross-sectional study performed in a school hospital in São Paulo, southeastern of Brazil. Participants were 24 doctors in two-years medical residency program of Internal Medicine. They answered questionnaire about sociodemographic data, clinical complaints, occupational informations and perception of work organisational predictors for Burnout Syndrome. The outcome was analysed by their response of Maslach Burnout Inventory (MBI).

Results Most of the participants were female (58.3%), single (91.7%), living alone (66.7%), being the first year of the program (54.2%), working 60 hours/week (83.3%), have another job (62.5%) and reported high number of complaints (54.2%). The mean age of participants was 26 years old. The Burnout Syndrome was characterised in 50% of participants. The frequency of perceived work organisation stressors were: excessive demands (66.7%) with high control at work (79.2%), low recognition by preceptors (87.5%), low valuation by the institution (79.2%) and low support from colleagues (62.5%). Most of them considered their work important (70.8%).

Conclusions These workers presented Burnout syndrome as reported in other studies with similar population. The perception of predictors for this condition in their postgraduate program shows a stressful situation. More than employees, they have a study bond with this program and negative impacts in their learning could happen. It is necessary to analyse organisational factors to create policies aimed to minimise occupational and psychosocial stressors.

Objective To describe the national incidence of needlestick injury in Taiwan healthcare workers.

Methods From 49 hospitals that consist of much larger dataset reported from 49 hospitals that are members of the National Taiwan Hospital, National Taiwan University, Taipei, Taiwan. The annual number was estimated to be 44,939 HCWs.

Results A total of 1,837 NSIs were reported between Jan 1st and Dec 31th 2011. The annual number was estimated to be 5,663 NSIs per hospital size, 8,319 per HCWs, and 7,828 per inpatient-day; indicating similar estimates using different denominators. The estimated annual frequency of pathogen-specific NSIs was 970 for hepatitis B, 1,094 for hepatitis C, and 99 for HIV.