were males. Of the males 37.8% (n = 189) were regular smokers, while 24.6% (n = 123) consumed alcohol daily.

The prevalence of shoulder pain, wrist/hand pain, knee pain, neck pain and back pain in the past one month was 4.4% (n = 32), 4.5% (n = 33), 5.4% (n = 39), 4.7% (n = 34) and 6.1% (n = 44) respectively. Workers working in fabricated metal product industries had the highest proportion of having shoulder pain (7.4%, n = 07). In the same category wrist/ hand pain was 10.5% (n = 10) and knee pain was 9.5% (n = 09). Thirty one (4.3%, n = 31) were having asthma prior to the study.

The prevalence of wrist pain (p = 0.025) and knee pain (p = 0.006) were significantly associated with the industry category. Sex of the worker was not significantly associated any musculoskeletal disorders assessed.

Conclusion Musculoskeletal diseases are prevalent among the study population. This needs to be investigated in-depth to identify the correlates to plan interventions.

Session: F. Health care II

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

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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

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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 neutralisation test for pandemic virus retroviral pseudotypes, were determined. Two logistic regression models to identify risk factors in both stages were conducted.

Results 1378 workers from 13 workplaces, with 41.7 years of age average and 68.7% (947) of them women, participated in both stages. The A (H1N1) pdm09 seroprevalence was at first stage: 26.5% (365) (7.4% - 43%) vs. 20.8% (11) in controls (blood donors); and at the second stage: 33% (215) (18.2% - 47%) in vaccinated and 27% in unvaccinated (196) (11.6% - 50%). In regression models, occupational exposure to patients with influenza suspicion, medical job category, and vaccination, determined the seropositivity of antibodies against the pandemic virus.

Conclusions Seropositivity of antibodies against pandemic virus that we found in both groups, is in the range of the international studies: in vaccinated (2.8 to 40.9%) as in unvaccinated (18.8 to 64.7%). The response in the vaccinated (33%) and unvaccinated 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

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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