

Results Out of the total 743 workers, majority were males (71%). Higher proportion of workers (59%) belonged to 20 - 39 year age group. Twenty four percent and 28% of the study population smoked cigarettes and drank alcohol regularly respectively. Only 6% of workers had a pre employment medical examination and periodic medical examinations. Of the workers only 38% were using personal protective equipment. 47% of workers reported that compensation claims were paid for accidents at the factory. 62% of the workers knew how to use a first aid box.

Conclusion The provision of occupational health services to workers in small scale industries is not satisfactory and needs improvement.

37 PERCEPTIONS AND AWARENESS OF RISK IN THE WORKPLACE AMONG MIGRANTS TO AUSTRALIA

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Objectives Migration has been important to the wealth and development of Australia and one in four Australians are born abroad. Our analysis of the national Multi-Purpose Household Survey showed generally higher risks in specific industrial settings but not among migrant workers. Anecdotal evidence, however, suggest that migrant workers are exposed to more workplace hazards. In qualitative interviews we explored perceptions of health and safety and experiences in home countries and in Australia.

Methods 92 purposively sampled migrant workers took part in individual interviews (n = 15) or 8 focus groups (n = 77) from 22 countries (20 from low to middle income countries (LMICs)). Migrants were sampled via migrant organisations, trade unions or via advertisements in the local press. Interviews were digitally recorded, anonymised, and transcribed verbatim. NVivo 10 was used to organise and explore coded transcripts. A concurrent thematic analysis was conducted. Themes around each category were verified and confirmed by constant comparison and searching across all interviews for similar themes and categories for analysis.

Results The key themes that emerged included poor understanding of occupational health and safety, particularly among those from LMICs and even among those with a relatively higher education level; general perception that Australia was a safe place to work in although there were reports of risky practices (e.g. long working hours) and overt discriminatory practices such as racism or bullying in workplaces; and a general resilience towards adversity in workplaces. Social support networks (e.g. via churches) or the commitment to sending remittances to family in home countries played an important role in coping with such adversity. Many tried to explain the racism as humour, and incidents were rarely reported.

Conclusion These findings of a poor understanding of health and safety among migrants from LMICs, shed some light on the context which might result in under-reporting in national surveys.

38 OCCUPATIONAL HAZARDS IN SOME SELECTED SMALL SCALE INDUSTRIES IN A DISTRICT OF SRI LANKA

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Occupational hazards in some selected small scale industries in a district of Sri Lanka

Objective To identify occupational hazards in the work environment in small scale industries in a district of Sri Lanka

Method A descriptive cross sectional study was carried out in selected categories of small scale industries namely food and beverages, apparel, non metallic mineral products and fabricated metal products in a district of Sri Lanka. A small scale industry was defined as a work setting with less than 20 workers. A sample of 102 factories was randomly selected using Census of Industries Sri Lanka in 2003/2004. Interviewer administered pre tested checklist was used for data collection.

Results Out of 102, 78.4% (n = 80) of the factories did not have safety signs displayed while machines were properly guarded only in 25 (24.5%) of the factories. The working environment was found to be accident prone in 38.2% (n = 39) of the industries. Lighting was adequate in 93 (91.2%) and noise was found to be excessive in 35 (34.3%) factories.

A functioning safety committee was available in 5 (4.9%) industries while workers trained in occupational safety and first aid, were present only in 18.6% (n = 19) and 23.5% (n = 24) of the factories respectively. Only 24 (23.5%) industries had a protocol developed to act in an emergency situation

Accidents were recorded only in 16 (15.7%) factories. Separate meal room and a changing room were available in 62.7% (n = 64) of the factories.

Conclusion The working environment of small scale industries was found to be unsatisfactory. Detailed studies are warranted to assess the hazards in depth. However, measures should be planned to improve the working environment and health of small scale industry workers since they represent a significant percent of the labour force in Sri Lanka.

39 PREVALENCE OF SELECTED HEALTH ISSUES AMONG WORKERS IN SMALL SCALE INDUSTRIES IN A DISTRICT IN SRI LANKA

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Prevalence of selected health issues among workers in small scale industries in a district in Sri Lanka

Objectives To assess the prevalence of selected health issues among workers, in small scale industries in a district in Sri Lanka

Method A cross sectional study was conducted among workers in four selected small scale industry categories namely food and beverages, apparel, non metallic mineral products and fabricated metal products in a district of Sri Lanka. A small scale industry was defined as a work setting with less than 20 workers. The census of Industries Sri Lanka 2003/2004 was used as the sampling frame. Cluster sampling using probability proportionate to size of the workers was done. Cluster size was eight and eighty clusters were selected. Data was collected using a pre-tested interviewer administered questionnaire.

Results Analysis was based on 727 workers. A majority (63.8%, n = 464) were in the age group 20-39 years and 499 (68.6%)

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.

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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.

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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.

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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