

P-65 MENSTRUAL DISORDERS IN HAIRDRESSERS: A CROSS-SECTIONAL STUDY

¹Aouatef Mahfoudh, Raja Ammar, Asma Kheder, Noura Bel Haj, Amira Omrane, Taoufik Khalfallah. ¹University of Monastir, Tunisia

10.1136/OEM-2021-EPI.184

Aims Determine the frequency of menstrual disorders and identify their risk factors in hairdressers of childbearing age.

Methods In a cross-sectional study, participants were all female hairdressers below 50 years of age working in the region of Mahdia in Tunisia (n=80). A control group comprised female office workers (n=80), with respective matching criteria. Menstrual disorders were defined as short cycles, long cycles, irregular cycles and bleeding or spotting between periods (intermenstrual bleeding). The data were analyzed by logistic regression calculating odds ratios (OR).

Results The frequency of menstrual disorders was significantly more frequent in the hairdressing population with a predominance of irregular menstrual cycle type disorders (51.3%), followed by short cycle type disorders (20%). Menstrual disorders were significantly associated with occupation ($p = 0.00$), non-use of gloves ($p = 0.00$), ventilation ($p = 0.00$) and the presence of a closed waste cycle ($p = 0.00$). After applying logistic regression, hairdressers were significantly more at risk of menstrual disorders ($p = 0.001$) than female office workers with an OR = 4.31 (95% CI =1.8–10.33).

Conclusion A disruption of the menstrual cycle can interfere with the fertility of workers and be the cause of delayed contraception. This is why preventive actions at different scales need to be applied.

P-68 OCCUPATIONAL HEALTH AND SAFETY PRACTICES IN A SMALL CONSTRUCTION COMPANY IN PIURA, PERU

¹Norvil Mera Chu. ¹Universidad de Piura, Peru

10.1136/OEM-2021-EPI.185

Introduction Participatory programs for occupational risk management are becoming more important in small workplaces in developing countries such as Peru. The current legislation on occupational health and safety (OHS) in Peru is more focused on occupational exposure in big enterprises, however. In small construction companies, workers have significant high-risk occupational exposure to suffer accidents and diseases related to physical, locative, ergonomic and mechanical factors. Most of these companies do not have an OHS system adapted to their reality.

Objectives The purpose was to describe the implementation of the OHS System and its progressive improvement during 3 years in a small construction company in Peru and to show how it turned out to be a good investment and a competitive advantage.

Methods This research was a case report study. The unit of study was the economic indicators of expenses and income of a small construction company, related to OHS activities as training programs, involving workers in safety inspections, performing medical examinations for workers, performing internal audits, among others. Besides, the impact of the system on the frequency of accidents and illnesses among workers, on absenteeism, on labour inspections, on getting clients, etc. was analyzed. The instrument used was a data collection sheet. A

database was created in Microsoft Excel 2007. SPSS software package was used.

Results After 3 years since the OHS system implementation, the frequency of accidents was reduced by 25%. Absenteeism was reduced by 30%. The enterprise got its OHS system certified and got more clients due to its OHS standards, which implied more economic income and a worth difference compared to other companies.

Conclusion It was a good investment to implement and improve the OHS system. It is necessary to implement studies in other small enterprises in developing countries.

P-69 TEACHING INTERVENTIONS IN OCCUPATIONAL HEALTH AND SAFETY SYSTEM IN A SMALL METAL MECHANIC COMPANY IN PIURA, PERU

¹Norvil Mera Chu. ¹Universidad de Piura, Peru

10.1136/OEM-2021-EPI.186

Introduction There are several small enterprises in Peru that provide services to mining, construction and oil companies which increase the probability of accidents and diseases. Interventions to educate and train workers in prevention, especially participatory programs for occupational risk reduction, are becoming very important in small workplaces in developing countries like Peru, where there is a significant work population which is underserved and includes people with some issues such as low-literacy and limited professional academic training.

Objective The purpose of the present study was to describe the implementation of teaching interventions and its progressive improvement during 3 years in a small metal mechanic company in Peru and to show its impact in the prevention culture.

Methods The unit of this case report study was the indicators of teaching interventions as number of participants, professions, time working in Occupational Health and Safety (OHS), education methods used and a survey at the end of intervention. Besides, the impact of the intervention on the frequency of accidents and illnesses in workers, on absenteeism and on labor inspections was analyzed. The instrument used was a data collection sheet.

Results During 3 years, the teaching interventions implemented were case discussions, role games and performance-feedback. The frequency of accidents was reduced by 22%. Absenteeism was reduced by 33%.

Conclusion Teaching interventions had goods results in prevention culture by reducing accidents and absenteeism in this small metal mechanic company. It is necessary to implement studies for assessing the effect of teaching interventions in OHS in other small enterprises in developing countries.

P-75 CORRELATES OF POST-TRAUMATIC STRESS DISORDER (PTSD) AMONG AMBULANCE PERSONNEL IN THE WESTERN CAPE PROVINCE, SOUTH AFRICA

¹Itumeleng Ntatamala, Shahieda Adams. ¹University of Cape Town, South Africa

10.1136/OEM-2021-EPI.187

Introduction Ambulance personnel are exposed to various occupational stressors which predispose to the development

of stress reactions such as PTSD. Increased prevalence of PTSD in ambulance personnel has been found compared with the general population and other emergency frontline workers.

Objectives To determine the factors associated with an increased risk for PTSD in ambulance personnel and the barriers faced in accessing support for work related stress (WRS). **Methods** A cross-sectional study of voluntary participants comprising 388 ambulance personnel was conducted. Participants completed self-administered questionnaires: Impact of Event Scale-Revised (IES-R), EMS Critical Incident Inventory (CII), EMS Chronic Stress Questionnaire (EMS-CSQ), SF-36 Quality of Life questionnaire (SF-36) and Connor-Davidson Resilience Scale (CD-RISC). There were used to assess PTSD and level of occupational stressors.

Results The prevalence of PTSD in the study population was 30%. Participants were predominantly female (55%), with a median age of 38 (Interquartile Range [IQR] 31–44) years. 83% had a professional qualification. Those with PTSD were more likely to be current smokers (Odds Ratio [OR]=1.76, 95% Confidence Interval [CI]: 1.05 - 2.95), to be current illicit drug users (OR=16.4, 95% CI: 1.87 - 143.86) and to have drinking problems (OR=3.86, 95% CI: 1.80 - 8.23). Self-reported mental health condition (OR=3.76, 1.96 - 7.21), being treated for a medical condition (OR=1.95, 1.22 - 3.11), chronic WRS exposure (OR=1.05, 1.04 - 1.07) and high critical incident stress score (OR=1.03, 1.02 - 1.04) were positively associated with PTSD risk. Barriers to seeking help for WRS included concerns that services were not confidential, and that the participant's career would be negatively affected.

Conclusion PTSD prevalence in ambulance personnel is considerably higher than those found in previous studies conducted among this occupational group in the Western Cape. Identified risk factors and exposures should inform prevention strategies and interventions designed to support ambulance personnel with a greater focus on addressing barriers to accessing care.

P-77 WORK-RELATED TRAUMATIC FATALITY IN THE CANADIAN PROVINCE OF SASKATCHEWAN, 2007–2018: TRENDS AND ASSOCIATION WITH ECONOMIC FACTORS

¹Samuel Kwaku Essien, Cindy Feng, Catherine Trask. ¹University of Saskatchewan, Canada

10.1136/OEM-2021-EPI.188

Background Understanding the extent of work-related fatality (WRF) burden can provide insight into prevention efforts. The Canadian province of Saskatchewan demonstrates an increased WRF burden over other provinces. Still, the evolution of this WRF burden over time remains unclear and this limits understanding of the true pattern of fatalities at the workplace and identification of potential WRF leading indicators. This study examined the WRF rate in Saskatchewan over the past decade, as well as potential risk factors.

Methods Retrospective linked Saskatchewan workplace traumatic fatalities and Statistics Canada labour force survey data were used. Fatality cases were then aggregated by year, season, worker characteristics (e.g., age, sex, and industry type), total employment, total labour force, and the number of unemployed workers. Yearly WRF rates were calculated using the

number of fatalities as the numerator and yearly total employment numbers as the denominator. A generalized additive model with Poisson distribution was carried out to examine the association of WRF rates to personal characteristics and economic indicators.

Results The study identified 220 traumatic WRF cases from 2007 to 2018. The average twelve-year WRF rate was 0.28 ± 0.07 per 100,000, with a stable WRF rate observed between 2013–2014 and 2015–2017 and an increasing trend between 2017–2018. Men were 13 times more likely to have WRF than women (RR=13.7, 95% CI: 10.48–17.9), and participants aged 60+ years were disproportionately affected by WRF (0.70 ± 0.21 per 100,000). The construction industry experienced the highest WRF risk (RR=9.2, 95%CI 6.1–13.8). Risk of WRF was found to increase with unemployment rate, but dropped when unemployment rate was highest.

Conclusion The study findings show a rising trend in recent (2017–2018) WRF rate, with transient increases in unemployment rate compounding the problem. Targeting prevention strategies towards high-risk population and age groups and during periods of economic downturn could help address fatalities at work.

P-79 PHYSICIANS' EXPERIENCES OF WORK, SUPPORT AND LEADERSHIP DURING THE FIRST WAVE OF THE COVID-19 PANDEMIC: STORIES FROM SWEDISH HOSPITALS

¹Emma Hagqvist, Karin Nilson. ¹Stockholm University, Sweden

10.1136/OEM-2021-EPI.189

Introduction Positive work engagement can increase in times of hard pressures, and especially when organisational resources are at place. Nevertheless, such hard pressure as the COVID-19 pandemic on care processes is not seen in modern times in Sweden. Inherent unpredictability of a pandemic together with the initial lack of reliable scientific data have posed major challenges to healthcare professional.

Objective The aim of this study is to describe hospital-based physicians experiences of work, support and leadership in the health organisation they worked in during the first wave of the COVID-19 pandemic.

Methods A total of 25 physicians from different clinical units, and different hospitals in Sweden were interviewed between July and October of 2020. Interviews were transcribed verbatim and analysed using a qualitative content analysis as described by Graneheim, Lindgren and Lundman (2017). Analysis was inspired by a system approach sorting experiences on micro, meso and macro levels.

Results Preliminary results show that physicians experienced on micro level physicians struggled to keep their health and control over their work situation. On meso level, physicians described trust in and support from first line managers. However, organisational and health service leadership were lacking. Physicians led the transition from regular to pandemic care, which was perceived as positive.

Conclusions Health service organisation can learn from the physicians' experience both in preparation for the next crisis and the importance of including medical professions in the organisation of care.