

Results Most of the return migrant workers who had long term (>1 years) exposed with solvents, biological or chemical occupation have less than the normal sperm counts than non-migrant cases. BMI was normal but the mental stress on return migrant workers having more than others. Clinical findings of less than 20 million/mL sperm concentration, progressive motility 32%, Odds ratios (ORs), after allowing for confounding, were 2.07 (95% confidence interval (95% CI) 1.24 to 3.44) for 1–3 years exposure to solvents and 3.83 (95% CI 1.37 to 10.65) for more than 3 years exposure. Chances of fertilization was at least 1–2 year among long term migrant return workers.

Conclusion Occupational hazards in reproductive life is more seen among the mental stress workers. It may be due to improper use occupational safety clothes, equipment etc. Proper counselling, Workplace safety rules and regulation policy should be clearly documentation for all migrant workers. Occupation physician screen all workers health every 3 months. Education, awareness and changing attitude of work style is essential in this globalization era.

P.3.15 SUICIDE TRENDS BY OCCUPATION IN SOUTH AFRICA, 1997 TO 2016

¹Tahira Kootbodien, ¹Kerry Wilson, ¹Nonhlanhla Tlotleng, ^{1,2}Nisha Naicker. ¹National Institute for Occupational Health, Johannesburg, South Africa; ²School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

10.1136/OEM-2019-EPI.274

Background The risk of suicide varies across occupations. However information is limited in South Africa. Surveillance data are vital to raise awareness of suicide risk for effective interventions in workplaces.

Method To assess trends in suicide-related mortality by occupation, we analysed underlying cause of death data and occupation information from vital registration data from Statistics South Africa. Suicide (X60-X84) was coded using the 10th Revision of the International Classification of Diseases (ICD-10). Occupation groups were based on the South African Standard Classification of Occupations (SASCO) groups: (1) managers, (2) professionals, (3) technicians, (4) clerks, (5) service workers, (6) skilled agricultural and fishery workers, (7) craft and related trade workers, (8) plant and machine operators and (9) elementary occupations. Multivariate logistic regression analyses were performed to calculate mortality odds ratios (MOR) for occupation groups in men and women, adjusting for age, year of death, education level, marital status and province of death.

Results The 20 year study examined 7 113 episodes of suicide in South Africa of all persons of working age from 1997 to 2016. Deaths by suicide increased from 1997 (n=93, 0.05%) to 2016 (n=389, 0.15%, nptrend, p<0.001). Among men, the risk of suicide was highest in skilled agricultural and fishery workers (MOR=3.0, 95% CI 1.75–5.16). Among women, risk of suicide were highest in skilled agricultural and fishery workers (MOR=2.7, 95% CI 1.03–6.84) and clerical workers (MOR=2.40, 95% CI 1.29–4.46).

Conclusion The results show that agricultural and fishery workers are at highest risk of suicide in men and women of working-age. There is a need for future studies to investigate explanations for the observed differences across occupations, particularly in people employed in lower skill-level groups.

P.3.16 THE ASSOCIATIONS BETWEEN PSYCHOSOCIAL WORK CONDITIONS AND WORK SUSTAINABILITY: FINDINGS FROM A NATIONAL SURVEY OF WORKING PEOPLE IN TAIWAN

Yi-Jing Li*, Hsi-Chen Liu, Yawen Cheng. *The Institute Of Health Policy And Management, National Taiwan University, Taipei, Taiwan*

10.1136/OEM-2019-EPI.275

Background One of the aspects of work sustainability concerns workers' intention to stay at the current job until retirement age. While psychosocial work conditions are expected to influence workers' intention to stay, its distributions across occupations and the associations with psychosocial work factors have not been well understood.

Methods We analyzed data from a national survey conducted in 2010, consisting of 11 209 male and 8189 female workers aged between 25 to 55 years old. Intention to stay at the current job was assessed by a single question: 'Thinking of your health status, would you expect yourself to stay at the current job at age of 60 years old?'. Responses were coded as 'probably yes', 'probably not', 'not sure' and 'not willing'. We regrouped 'probably not' and 'not willing' as 'no intention'. Information concerning age, educational attainment, occupation type and psychosocial work factors were also assessed by the questionnaire.

Results Descriptive analyses showed that 14.2% and 17.1% of male and female workers did not intend to stay the current job at the age of 60 years old. Lack of intention was more prevalent in younger workers, workers with lower employment grade and workers in certain industrial sectors including electronics manufacturing industries for both genders and health care industry for female workers. Workers in these industries were also significantly younger than those in other industries. Findings from multivariate logistic regression models indicated that lack of intention to stay was associated with nonstandard work shift, higher psychosocial demands, physically demanding work, lower job control and higher job insecurity.

Conclusion A substantial proportion of workers lack of intention to stay at the current job until old age. We suggest that improving work conditions may help to keep workers in employment until old age, especially among workers in socioeconomic lower positions.

P.3.17 PREVALENCE AND DISTRIBUTION OF MUSCULOSKELETAL DISCOMFORTS AND THE ASSOCIATIONS WITH WORK-RELATED ERGONOMIC AND PSYCHOSOCIAL FACTORS IN EMPLOYEES OF TAIWAN

¹Hsi-chen Liu*, ¹Yawen Cheng, ²Jiune-Jye Ho. ¹Institute of Health Policy and Management, College of Public Health, National Taiwan University, Taipei, Taiwan; ²Institute of Labor, Occupational Safety and Health, Ministry of Labor, New Taipei, Taiwan

10.1136/OEM-2019-EPI.276

Background and objectives Musculoskeletal discomforts (MSDs) attribute greatly to work-related disability, but the social distributions of MSDs in the general working population have seldom been investigated. Moreover, although ergonomic and psychosocial factors at work are known to contribute to musculoskeletal risks, their independent effects on specific sites of MSDs have not been well assessed. This study aimed to examine the social distributions of MSDs and the associations of ergonomic and psychosocial work factors