

behaviours, comorbid conditions, shift work and apnoea. Removal of relational injustice was associated with better sleep after full adjustments (OR 0.83; 95% CI: 0.71–0.96). Removal of procedural injustice did not improve sleep (OR 0.91; 95% CI: 0.77–1.06).

Conclusions These results suggest that relational injustice can worsen sleep quality, while removal of relational injustice appears to improve sleep.

Oral Session 2 – Migrant Workers

002-1 IS IT TRUE THAT MIGRANT WORKERS SUFFER FROM OCCUPATIONAL HEALTH INEQUALITIES DUE TO WORK-RELATED PSYCHOSOCIAL RISK FACTORS? PRACTICAL EVIDENCE FROM A FIELD STUDY IN ITALIAN ENTERPRISES

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Introduction The global labour market is increasingly employing migrant workers (MWs) mainly in high-risk sectors, where they are frequently exposed to work-related psychosocial risk factors (WPR) that might contribute to the development of chronic disorders.

Objectives Aim of the contribution is to provide evidence on the complex link between WPR and MWs' health status, through a comparison with Italian workers (IW), based on objective clinical data.

Methods Observational cross-sectional study, performed from 2011 to 2013 in 2 enterprises (i.e. catering company and cast-iron foundry). Occupational health physicians (OHP) filled in a comprehensive multi-item questionnaire, also focusing on WPR outcomes, and collected clinical documentation for 99 MWs and 105 IWs, paired by gender and age (± 10 years). Chi-square, Fisher's exact and Student's t tests ($p \leq 0.05$) were performed with SAS.

Results MWs' main features: 55% men; mean age 34.5 years; mainly from East Europe (34%), Asia (26%), North Africa (16%); 62% labour migrants; on average 11.4 years of regular status in Italy, 15% Italian citizens. MWs showed, as compared to IWs: lesser job-specific seniority ($p = 0.002$), leadership roles ($p = 0.0199$), full-time work ($p = 0.0125$), awareness of the possible association between bad working conditions and poor health ($p = 0.0134$); self-perceived worse occupational health and safety (OHS) training ($p = 0.0024$); greater job satisfaction ($p = 0.0415$); more difficulties in accessing to welfare state services ($p = 0.0013$) and fewer ongoing medical treatments ($p = 0.0486$); higher prevalence of documented low back (41% vs 28%, $p = 0.0404$) and upper limb (32% vs 16%, $p = 0.0086$) musculoskeletal disorders; no significant differences in self-perceived discrimination at work, absenteeism, documented psychiatric disorders (e.g. depression, anxiety, sleep disturbances).

Conclusions The study is suggestive of a link between WPR and OHS inequalities among MWs, as well as of an association between the condition of migrant and some musculoskeletal disorders. Targeted workplace efforts, with full involvement of

OHP, are needed to enable MWs' effective integration, especially from the health status viewpoint.

002-2 DIFFERENCES IN EXPOSURE TO LONG WORKING HOURS AND POOR SELF-REPORTED GENERAL HEALTH IN LATIN AMERICAN AND SPANISH-BORN WORKERS IN SPAIN: THE PELFI COHORT STUDY

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Introduction Several studies have shown a relationship between long working hours (LWH) and adverse health outcomes (e.g., cardiovascular disease, occupational injuries, mental health conditions). These effects are typically attributed to increased exposure to occupational risk factors as well as fewer opportunities for rest and recovery. As it is known that immigrant workers generally have poorer working and employment conditions than other groups, the purpose of this study was to compare the prevalence of LWH with self-reported general health status (SRGH) by immigrant status in a cohort of Latin American immigrant and native-born workers in Spain.

Methods Data were drawn from the Immigrant Cohort Studies Project (PELFI), a prospective cohort comprised of a convenience sample of 180 families residing in Alicante, Spain. The main explanatory variable was LWH. LWH was defined in two ways: extended hours (defined as >40 h/week) and excessive hours (defined as >51 h/week). Poor SRGH was the outcome of interest. Analyses were adjusted for sex and age. For this study, 113 workers were selected of Latin American origin and 43 were Spanish-born. Prevalence and adjusted odds ratios (aOR) were calculated with 95% confidence intervals (95% CI).

Results The prevalence of poor SRGH was 20.9% in Spanish-born and 47.8% in LA immigrants ($p = 0.002$). Among immigrants, 22.3% reported extended hours and 8.0% reported excessive hours; among natives, 26.2% and 7.1% reported extended and excessive hours, respectively, neither of which were statistically significant. The trend seen when work hours increased was different in Spanish-born workers (extended hours: aOR = 1.75 95% CI = 0.33–9.07; excessive hours: aOR = 1.90 95% CI = 0.14–25.25) than in immigrant workers (extended hours: aOR = 0.75 95% CI = 0.29–1.92; excessive hours: aOR = 0.91 95% CI = 0.21–3.86).

Conclusions These findings suggest that increasing hours of work may negatively influence the health status of native workers, a trend that was not seen in immigrant workers, and could possibly be explained by the healthy work effect.

002-4 RISK OF DEHYDRATION: CALIFORNIA LATINO FARMWORKERS' KNOWLEDGE OF AND ACTIONS TAKEN TO PREVENT DEHYDRATION

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Introduction Farmworkers experience intense heat in California's summer harvest. They are at heightened risk for heat related illness (HRI) especially if their intake of water is insufficient to maintain evaporative cooling and therefore protect core body functions.

Methods 288 Latino farmworkers throughout California were monitored across a work-shift in summer 2015. Weight was recorded before and after the shift in a minimum level of clothing to assess change in hydration status. Questionnaires were administered in Spanish.

Results All farm locations provided water for their workers as required by regulation. 226 (78%) of the participants lost weight and 44 (15%) lost $\geq 1.5\%$ indicating clinically-significant dehydration. Despite mandatory annual training, only 38% knew ≥ 3 cups of water should be consumed/hour under hot conditions. No association was found between knowledge of hydration needs and action (drinking sufficient volume or frequency). Men were likely to drink a larger volume of water than women ($P = 0.002$), but not more frequently. Yet 20.6% of the men lost $\geq 1.5\%$ of their body weight versus only 4.2% of women ($P = 0.0003$). Despite 209 (72.8%) stating they were thirsty to extremely thirsty when working in hot weather, 276 (96.8%) believed they were drinking enough to keep safe. Using multivariate logistic regression, the risk of losing $\geq 1.5\%$ weight was associated with being male (OR = 5.4, 95% CI: 1.8–16.6), with a higher knowledge of hydration needs (OR = 2.4, 95% CI: 1.2–4.7) and of borderline significance with any type of piece work (paid by quantity rather than by time) OR = 2.2 95% CI (0.95–4.8).

Conclusion Latino farm workers are not recalling/using knowledge of hydration needs to prevent HRI at work. The reasons behind this disconnect need further exploration to create strategies to reduce dehydration and HRI risk.

002-5 WORKPLACE DISCRIMINATION AND MENTAL HEALTH AMONG ETHNIC MINORITY WORKERS IN AUSTRALIA

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Introduction Discrimination occurs when a person is treated less favourably than another person in a similar situation because of their race, sex, ethnicity age or migrant status. It occurs at the organisational or individual level and can lead to work segregation where people are relegated to physically or psychologically burdensome jobs or to rude and dismissive behaviour. The aim of this project was to examine the prevalence of workplace discrimination among ethnic minority workers in Australia, and its impact on mental health.

Methods Current workers of Arabic, Chinese or Vietnamese background aged 18+ years were interviewed by telephone in English, Mandarin, Cantonese, Vietnamese or Arabic. The General Ethnic Discrimination Scale assessed recent and lifetime history of workplace discrimination and its stressfulness. The 5-item Mental Health Inventory assessed current mental health status. Univariate statistics and linear regression examined the association between demographic and occupational characteristics.

Results 585 workers (51% female; 195 from each group) participated in the survey. 18% of Arabic, 77% of Vietnamese and 52% of Chinese interviewed in a language other than English. Occupation varied by ethnic group with 42% of Vietnamese in

labouring, machine operating or sales jobs compared with 26% Arabic and 24% Chinese. The prevalence of recent (31% $p = 0.17$) and lifetime (55% $p = 0.14$) discrimination did not vary between groups. However, after adjusting for age, sex, language of interview, occupation, and year of arrival in Australia, Arabic workers reported a twofold increase in discrimination-related stress (Coef 2.34, 95% CI: 1.25–3.42) and significantly poorer mental health scores (Coef -2.3 –95%CI: -4.3 -0.3) compared with Chinese workers, which further reduced after adjusting for discrimination-related stress (Coef -4.2 , 95% CI: -7.3 – 1.2).

Discussion While prevalence of work-related discrimination was similarly high among all workers, the stressfulness of that discrimination varied between groups. Discrimination-related stress was associated with poorer mental health among Arabic workers.

002-6 A CROSS-SECTIONAL ANALYSIS OF THE EFFECTS OF CO-OCCURRING LOW JOB CONTROL AND WORKPLACE DISCRIMINATION ON SICKNESS ABSENCE IN BLACK, HISPANIC AND WHITE OLDER ADULTS PARTICIPATING IN THE U.S. LABOUR FORCE

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Introduction Several studies have reported an association between various psychosocial work factors and sickness absence. Much of the research has been conducted in Europe, leaving a significant knowledge gap about psychosocial exposures and outcomes in the US labour force. The objective of this study was to examine the effects of co-occurring low job control and high workplace discrimination on sickness absence in Black, Hispanic and White older adults aged 50 years and older participating in the US labour force.

Methods Using Health and Retirement Study data from 2010, regression models were used to examine the association between co-occurring low job control and high workplace discrimination, and health related work absence in the past year.

Results Mean number of missed days of work were similar for those with high job control, experiencing low workplace discrimination (ref), and those with low job control experiencing high workplace discrimination (11 days). Participants with high job control experiencing high discrimination, reported missing an average of 15.3 days. In unadjusted regression analysis low job control and high workplace discrimination was significantly associated with sickness absence in Hispanic (OR = 3.66) and Black (OR = 2.52) participants, while no association was evident in Whites. High control and high discrimination was associated with sickness absence in Blacks only in the unadjusted model (OR = 2.06, 95 CI = 1.11–3.811). Full adjustment for behavioural, sociodemographic, health, and work factors resulted in significant associations for Blacks with high job control experiencing high discrimination, who showed a 6.3-fold increased risk (95% CI = 1.26–31.511) of sickness absence. No associations were evident for Hispanic and White participants after adjustment for covariates.

Conclusions Workplace discrimination in Blacks working in high control jobs is strongly associated with sickness absence, and may further exacerbate well document health disparities. More research assessing effects of workplace discrimination and work environment on work and health outcomes is warranted.