Poster Presentation

Musculoskeletal

0019 THE ASSOCIATION OF ADOLESCENT SPINAL PAIN WITH WORK ABSENTEEISM IN EARLY ADULTHOOD – SIX-YEAR FOLLOW-UP DATA FROM A POPULATION-BASED COHORT

1,2Pieter Coenen*, 1Anne Smith, 1Peter Kent, 1Mark Harris, 1Daren Beales, 1Peter O’Sullivan, 1Leen Straker. 1School of Physiotherapy and Exercise Science, Curtin University, Perth, Australia; 2Department of Public and Occupational Health, Amsterdam Public Health Research Institute, VU University Medical Centre, Amsterdam, The Netherlands; 3Curtin Business School, Curtin University, Perth, Australia

Introduction For many, spinal pain first develops during adolescence. However, the extent to which adolescent spinal pain impacts work absenteeism later in life is largely unknown. We assessed the association of spinal pain in adolescence with work absenteeism in early adulthood, using a population-based cohort.

Methods Data from a sample of working people in the Western Australian Pregnancy Cohort (Raine) Study (n=476) were analysed. At 17 years of age, spinal pain (low-back or neck) with impact on work and/or study behaviour was self-reported. Six years later (at 23 years), participants replied to four quarterly text messages asking them about their work absenteeism, from which annual total and sickness absence were estimated. Negative binomial mixed-models were used to estimate the association between spinal pain and work absenteeism (Incidence Rate Ratios (IRR) with 95% confidence intervals (95% CI)).

Results Participants with adolescent spinal pain with impact at year 17 reported significantly higher (mean [SD]) total work absenteeism at year 23 (148.7 [243.4] hours/year), compared to those without pain (43.7 [95.2] hours/year); with IRR [95% CI]: 3.9 [1.5 10.3]. Comparable findings were found for sickness absence (IRR: 3.6 [1.3 10.2], with 94.1 [201.5] and 29.3 [75.0]) hours/year absence, respectively.

Conclusion Results of our study show a more than three-fold higher risk of work absenteeism in early adulthood among those with adolescent spinal pain with impact compared to those without spinal pain. These findings indicate that pain behaviour during adolescence can set a stage for work absenteeism later in life, underlining the importance of early pain prevention and management.

Poster Presentation

Occupational Medicine (SCOM/Modernet)

0022 ASSESSING SELF-REPORTED HEALTH EFFECTS BY FORKLIFT OPERATORS

1Hülya Gül*, 2Savaş Karbuz. 1Istanbul Medical Faculty, Public Health Department, Istanbul, Turkey; 2Gedik University, Istanbul, Turkey

Aim Forklift is a special machine used in transporting, lifting, carrying and storing heavy objects in logistics and in all other
Poster Presentation

Intervention Studies

0023 A PROSPECTIVE COHORT STUDY OF THE IMPACT OF RETURN-TO-WORK COORDINATORS IN GETTING INJURED WORKERS BACK ON THE JOB

1Tyler Lane*, 2Rebecca Lilly, 3Shelalee Hogg-Johnson, 4Tony LaMontagne, 5Malcolm Sim, 6Peter Smith. 1School of Public Health and Preventive Medicine, Melbourne, Victoria, Australia; 2Institute for Safety, Compensation and Recovery Research, Monash University, Melbourne, Victoria, Australia; 3Dunedin School of Medicine, University of Otago, Dunedin, New Zealand; 4Institute for Work and Health, Toronto, Ontario, Canada; 5Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada; 6Centre for Population Health Research, Deakin University, Melbourne, Victoria, Australia

Background Globally, 313 million missed at least four days of work in 2010 due to a work-related injury. Extended periods of work absence are costly and associated with poor health outcomes. Interventions that include return-to-work (RTW) Coordinators improve RTW outcomes, though they have often been investigated as part of a larger intervention package. We investigated whether Coordinator impact varies based on the stressfulness of interactions and whether it goes above and beyond functional aspects of their role and other workplace factors.

Methods A prospective cohort study of 632 workers in Victoria, Australia with more than ten days of compensation due to work-related injury. Participants rated the stressfulness of their Coordinator interactions, dichotomised into good and poor, and said whether they had a RTW plan. RTW plans are a functional responsibility of Coordinators. We analysed responses at baseline and six-month follow-up using logistic regression analyses, adjusting for demographic and workplace factors.

Results At baseline, RTW plans doubled odds of RTW and attenuated the impact of good Coordinator interactions, which had been associated with better RTW outcomes. At follow-up, the reverse was found: good interactions doubled odds of RTW while RTW plans were non-significant.

Conclusion The findings suggest that different aspects of Coordinator intervention have varied impacts on injured workers’ RTW outcomes depending on their trajectory. Functional benefits improved outcomes among shorter-duration claims, while interpersonal intervention improved outcomes among longer-duration claims. There are implications for how Coordinators target and interact with injured workers and other ways of improving their effectiveness.

Declaration of potential conflict of interest: I (Tyler Lane) receive salary support from WorkSafe Victoria through a grant for another project, the Compensation and Return to Work Effectiveness (CoMPARE) Project. All participants were WorkSafe clients, and WorkSafe conducted initial recruitment.

Oral Presentation

Respiratory

0024 THE OCCUPATIONS AT INCREASED RISK OF COPD IN THE UK BIOBANK COHORT

1Sara De Matteis*, 2Deborah Janus, 3Andrew Damton, 4David Fishwick, 5Lesley Rushton, 6Paul Cullinan. 1Imperial College London, London, London, UK; 2Health and Safety Executive, Bootle, UK

Background Occupational hazards are important, preventable causes of COPD but the high-risk occupations are uncertain. In an analysis of current occupation in the UK Biobank cohort we reported 14 jobs of increased risk (De Matteis, S. et al. 2016).

Aims and objectives Our aim was to develop these findings using lifetime job-histories to identify occupations at increased COPD risk, taking into account potential confounders.

Methods We used OSCAR, an online tool that automatically codes all job-histories using the UK Standard Occupational Classification (SOC) v.2000 (De Matteis, S. et al. SJWEH 2016). In 2016 we administered OSCAR to all UK Biobank participants with an email address (n=324,653). All paid jobs of >6 months duration, were collated and coded. COPD was spirometry-defined as FEV1/FVC< LLN. Prevalence ratios (PRs) for ever-exposure to each job vs. lifetime office work were estimated using Poisson regression adjusted for age, sex, centre and lifetime smoking.

Results Among 116,375 OSCAR-responders, we analysed the 94 551 with acceptable spirometry data and smoking information. Six occupations showed an increased risk of COPD confirmed by positive exposure-response trends, and in analyses restricted to never-smokers and never-asthmatics. In comparison with our findings for current occupation, some associations were confirmed (e.g. food/drink/tobacco processors: PR 1.70;95% CI:1.17–2.48) while others emerged (e.g. plastics processors: PR 1.86;95% CI:1.09–3.17; agriculture/fishing: PR 1.76;95% CI:1.22–2.55).