Interventions

0-61 BARRIERS AND FACILITATORS FOR PARTICIPATION IN WORKPLACE HEALTH PROMOTION PROGRAMS: PEER-TO-PEER INTERVIEWS AMONG EMPLOYEES

¹Denise Smit, Karin Proper, Josephine Engels, Sandra van Oostrom, Jennifer Campmans.
¹RIVM, Netherlands

10.1136/OEM-2021-EPI.65

Introduction Workplace health promotion (WHP) programs have shown to be effective in the reduction of body weight, increased psychological wellbeing and perceived health of employees. Despite the potential benefits for employees, participation rates of WHP programs are often low (10–64%).

Objectives To get more insight into reasons for (non)participation, the objective of this study was to identify the barriers and facilitators for participation in WHP programs from the employee perspective.

Methods Peer-to-peer interviewing, a method derived from citizen science, was used to actively involve the target group of employees. In total 14 employees working in the cleaning-, ICT- and facility- sector were trained to conduct interviews themselves with co-workers. All interviews were recorded and transcribed verbatim. The Consolidated Framework for Implementation Research (CFIR) was used to create an initial codebook, complemented with the constructs ‘interpersonal’ and ‘intrapersonal factors’ from the Social Ecological Model. Data were coded both deductively and inductively, and ranked by two researchers independently.

Results In total, 62 peer-to-peer interviews were conducted by the 14 peer-interviewers. Preliminary findings show that main barriers for participation in WHP interventions are a lack of knowledge about the programs and a negative attitude towards WHP (e.g. no belief that their employer can help them with improving their lifestyle). Facilitating factors identified were fit of the WHP activities to the employees’ needs and available (working) time to participate.

Conclusion Our findings on the main barriers and facilitators for participation in WHP according to employees may contribute to more successful implementation and higher participation rates in future WHP programs.

0-76 COMPLEX INTERVENTION TO PREVENT AND MANAGE MUSCULOSKELETAL PAIN IN NURSING STAFF AT WORK: COST-EFFECTIVENESS OF A CLUSTERED RANDOMIZED CONTROLLED TRIAL (INTEVAL_SPAIN)

¹Merce Soler-Font, Consol Serra, Josué Almansa, Michael Silva-Peñaherrera, Ignacio Aznar, José Maria Ramada. ¹Fundació Institut mar D'investigacions Mèdiques, Spain

10.1136/OEM-2021-EPI.66

Objective To evaluate the cost-effectiveness of a multifaceted workplace intervention to prevent musculoskeletal pain (MSP) in nursing staff.

Methods The study was a one-year cluster randomized controlled trial and encompassed participatory ergonomics, health promotion and case management. Control group received usual care. The societal and the Health System perspectives were used. Costs included direct health costs and indirect

costs. The outcomes were MSP, sickness absence and Quality-Adjusted Life Years (QALYs). MSP was measured with the Standardized Nordic Questionnaire at baseline, six and 12-month follow-ups. Sickness absence data were obtained from Human Resources database. QALYs were measured using the EuroQol-5D-3L at six and 12-month follow-ups. Incremental costs and effectiveness were modelled by GEE models and adjusted for sex, age, occupation and baseline values. Incremental cost-effectiveness ratios (ICERs) were calculated.

Results Total direct health costs were €102.80 and €73.57 for the intervention and control groups, respectively. The intervention costs were €27.96 per nurse and/or nursing aide. Neck, shoulders and upper back showed a statistically significant difference of 20 percentual points of MSP. From the societal perspective, the ICER in terms of MSP in the former anatomical site was €3.63 (€1.69 Health system perspective) to achieve 1-extra percentual point reduction of MSP. ICER were €60.58 and €28.21 for MSP in hands from societal and health system perspectives respectively; €11.18 and €5.21 respectively in legs; and €12.98 and €6.04 respectively in feet. In both societal and health system perspectives, the ICER was dominated by usual care for low-back pain, elbows, knees, sickness absence and QALY.

Conclusion The intervention was cost-effective to reduce MSP in neck, shoulders and upper back at 12-month follow-up compared to the control group. Health systems and society could implement this kind of multifaceted interventions in the workplace for nursing staff since the additional cost required to improve MSP seems to be low and affordable.

0-273 PILOT TESTING TWO TAKE-HOME EXPOSURE PREVENTION EDUCATIONAL SESSIONS WITH CONSTRUCTION WORKERS AND THEIR FAMILIES

¹Grant Tore, Diana Ceballos, Julia Noguchi, Jennifer Green, Junenetter Peters, Katie Carey, Jonathan Levy. ¹Johns Hopkins University, United States

10.1136/OEM-2021-EPI.67

Introduction ‘Take-home exposures’ occur when workers accidentally bring home contaminants from work. In construction, job responsibilities may expose workers to lead and other metals, which extend to their household members via the take-home pathway. It is crucial that construction workers are aware of the take-home pathway and learn about exposure prevention strategies.

Objectives This work is part of the RECLean Pilot Study, which aims to reduce lead in the homes of construction workers through educational and environmental interventions.

Methods We developed and evaluated a suite of educational materials to train construction workers and their families on strategies to prevent take-home lead exposure. Each of the two sessions targets a specific audience, with one tailored to construction workers and the other to workers’ family or household members. The sessions were originally developed to take place in person but given the COVID-19 pandemic we adapted them for online delivery as well.

Results Like traditional occupational health and safety trainings, the construction worker sessions present workers with best practices to prevent take-home lead and open discussion for how such practices may fit into their own routine after work. Alternatively, the family session is designed to engage

household members in discussion through a process derived from motivational interviewing. The materials for both sessions include an introduction, behavior scoring sheet, behavior wheel, and action plan. Facilitators and participants discuss strategies to prevent take-home lead, identify barriers participants (and their coworkers or families) experience when trying to change their behaviors, and ultimately prioritize a prevention goal.

Conclusion The materials for both educational sessions were developed based on current literature on take-home lead and behavioral theories and in partnership with lead and construction experts from multiple organizations. Using feedback from participants, project stakeholders, and session facilitators, we evaluate the feasibility and efficacy of these educational interventions.

0-352 EVALUATING PROGRAM EFFECTIVENESS ON RETURN-TO-WORK AFTER WORK-RELATED INJURY IN THE CONSTRUCTION SECTOR

Robert Macpherson, Ailin He, Mieke Koehoorn, Benjamin C Amick, ¹Chris McLeod.
¹University of British Columbia, Canada

10.1136/OEM-2021-EPI.68

Introduction Return-to-work (RTW) in the construction sector is more challenging than in many other sectors. Between 2010 and 2011, the Ontario Workplace Safety Insurable Board (WSIB) introduced the Work Reintegration (WR) program in an attempt to improve RTW outcomes for injured workers.

Objective To determine whether the WR program was associated with reducing work disability duration in the Ontario construction sector.

Methods WSIB claims data were extracted for construction workers compensated for time off work following work-related injuries between the years 2009 and 2015 (n=27,131). Claims receiving referrals to return-to-work (RTW) and vocational rehabilitation (VR) specialists were propensity score matched with claims receiving no referrals. Multivariable quantile regression models were used to examine differences in the cumulative disability days paid during two-years post-injury between the groups of claims before and after the WR intervention period and the differences in these differences.

Results Prior to the WR program, cumulative disability days paid was greatest among claims referred to VR specialists, followed by claims referred to RTW specialists (390 and 109 additional days than claims with no referrals, respectively). Following the WR program intervention, cumulative disability days paid reduced for all claims but most notably among longer duration claims referred to RTW specialists (reduction of 274 days at the 90th percentile in the disability distribution) and shorter duration claims referred to VR specialists (reductions of 255 and 214 days at the 25th and 50th percentiles in the disability distribution, respectively).

Conclusion The WR program intervention was effective in reducing the cumulative disability days paid for construction worker claims targeted under the various referrals. While the effects varied at different percentiles in the disability distribution, and by specialist referral, future research should examine the type and timing of services received to more fully understand what may be driving the overall findings.

0-423 EVALUATING CHANGES TO SICKNESS ABSENCE IN PRISON STAFF FOLLOWING THE IMPLEMENTATION OF A NATIONAL PRISON SMOKEFREE POLICY

¹Evangelia Demou, Daniel Mackay, Peter Craig, Alastair Leyland, Stuart Brown, Vasos Makris, Kathleen Boyd, Ashley Brown, Philip Conaglen, Lesley Graham, Nicola McMeekin, Jill Pell, Helen Sweeting, Emily Tweed, Kate Hunt. ¹University of Glasgow, United Kingdom

10.1136/OEM-2021-EPI.69

Objective Sickness absence (SA) is a significant problem for many workplaces, due to loss of productivity, increased workload on other staff, and resources spent to cover incapacity to work and restore health. To date, research on prison staff SA is still limited. High levels of SA related to mental health problems, including job-related stress, anxiety and depression have been reported for UK prison staff. In conjunction with stressful and often challenging working conditions which prison staff experience, organisational change can also impact on SA. In 2018 the Scottish Prison Service introduced comprehensive smoking restrictions across all prisons to protect prison staff and people in custody from second-hand smoke (SHS) exposure. The multi-phase, multi-methods Tobacco in Prisons (TIPs) study has evaluated this process and the impacts of the implementation of the smokefree policy; one part of this evaluation was to assess whether the smokefree policy impacted on prison staff SA rates and duration.

Methods and Results Box-Jenkins Autoregressive Integrated Moving Average (ARIMA) time series is used to analyse potential changes to sickness absence rates before and after the introduction of the smokefree policy. Change in absence duration before and after the implementation of the smokefree policy are analysed using Kaplan-Meier survival curves and Cox's proportional hazards models for all sickness absence events and by cause. Results from each methodology will be presented for the entire prison service, by cause of sickness absence event and by SHS exposure levels.

Conclusions The findings of this study cover a significant knowledge gap on sickness absence in an occupational cohort that often faces challenging and stressful working conditions. In the TIPs study we are able to model potential impacts on SA during organisational change. This information can help employers when developing policies and workplace interventions for employees in improving health and return-to-work times.

Job Control

0-42 THE MEDIATING ROLE OF UNHEALTHY BEHAVIORS AND BODY MASS INDEX IN THE RELATIONSHIP BETWEEN HIGH JOB STRAIN AND SELF-RATED POOR HEALTH AMONG LOWER EDUCATED WORKERS

¹Sandra van Oostrom, Karin Proper, Bette Loef. ¹National Institute for Public Health and the Environment, Netherlands

10.1136/OEM-2021-EPI.70

Introduction Poor psychosocial working conditions and unhealthy behaviors are known determinants of poor health. The objective of this study is to examine the mediating role of