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Abstract: This study examined Nordic research on psychosocial work environment and disability management, specifically employer strategies for preventing work disability in common mental disorders (CMDs). A scoping review was performed to identify strategies across several research databases, alongside contact with content experts, hand-searching of non-indexed journals, and internet searches. Identification and selection of relevant studies, charting of data, and collating and summarizing of results was done using a six-step framework for conducting scoping reviews. Several key elements and knowledge gaps were identified in current prevention approaches and workplace initiatives across the included studies. We propose a program theory for workplace prevention of CMD-related work disability. The program theory may help specify employer strategies, and bridge activities with stakeholders outside the workplace.
https://doi.org/10.1002/ajim.22964
Abstract: OBJECTIVES: To validate the factor structure of the Copenhagen Psychosocial Questionnaire (COPSOQ) in a North American population and dissect the associations between psychosocial factors and workplace psychological health and safety. METHODS: Confirmatory factor analysis and multivariate linear regression were used to determine the associations between COPSOQ dimensions and a global rating of workplace psychological health and safety. Models were stratified by sex, gender roles, and age. RESULTS: The COPSOQ factor structure was verified among Canadian workers. Three factors were found to significantly contribute to the global rating of the psychological health and safety for all workers. Few differences were observed across sex, gender roles, and age. CONCLUSIONS: This study identified dimensions of the psychosocial work environment that are strongly associated with the global rating of workplace psychological health and safety. Using a standardized questionnaire like the COPSOQ allows for comparisons over time, between different industries, and worker populations

https://doi.org/10.1016/j.ssci.2019.03.016

https://doi.org/10.1097/JOM.0000000000001498
Abstract: OBJECTIVE: The aim of this study was to evaluate the effect of the Quebec Healthy Enterprise Standard (QHES) on adverse
physical and psychosocial work factors and work-related musculoskeletal problems (WMSP). METHODS: Workers of 10 organizations completed questionnaires before (n = 2849) and 2 to 3 years following (n = 2560) QHES implementation. Outcomes were assessed using validated instruments. RESULTS: Workers exposed to adverse physical and psychosocial work factors had a higher prevalence of WMSP. After interventions, the prevalences of one adverse physical and three adverse psychosocial work factors were lower among workers exposed to interventions. Among men exposed to physical and psychosocial interventions, the lower prevalence of neck WMSP is compatible with a beneficial intervention effect. Other results generally showed few effects on WMSP. CONCLUSION: Results suggest that QHES implementation lead to a decrease in some adverse physical and psychosocial work factors. Few effects were observed on WMSP.


Abstract: BACKGROUND: Over the last decades, consumption of opioids for the treatment of pain increased steadily in the United States, Australia, and a few European countries. To date, no study has analysed time trends in opioid consumption across Europe. METHODS: We analysed data provided by International Narcotics Control Boards on the consumption of fentanyl, oxycodone, morphine, hydromorphone and pethidine in 40 European countries over the last decade. Trends in total opioid consumption from 1990 to 2016 in 22 selected European countries, the European Union (EU) as a whole, and, for comparison purpose, the United States, were analysed using the joinpoint regression analysis. RESULTS: In 2014-2016, opioid use was >10,000 defined daily doses for statistical purposes (s-DDD) per 1,000,000 inhabitants die in Western/Northern countries, whereas it was <1000 s-DDD in Southern/Eastern ones. In most European countries, opioid consumption increased to a great extent between 2004-2006 and 2014-2016; it rose from 6,477 to 8,967 s-DDD (+38.4%) in the EU, and from 14,598 to 16,491 s-DDD (+13%) in the United States. The increase in opioid use was steady.
since the early to mid-1990s in most European countries and it slowed down after the mid- to late 2000s. In Denmark, Finland, France, Ireland, Switzerland, Poland and the EU, opioid use levelled off or declined over most recent years. CONCLUSIONS: Consumption of opioid analgesics sharply increased in most European countries since the early to mid-1990s. This notwithstanding, in the mid-2010s there was still a more than 10-fold difference between the highest consumption in Western/Northern countries and the lowest one in Southern/Eastern countries. SIGNIFICANCE: This study provides an updated and comprehensive analysis of time trends and geographic variations in opioid consumption use across European countries over the last three decades.

https://doi.org/10.1007/s00420-018-1393-5

Abstract: PURPOSE: We developed a job exposure matrix (JEM) to study the association between long-term exposure to heavy physical effort or heavy lifting and carrying at work with disability pension due to musculoskeletal disorders and premature all-cause mortality. METHODS: Exposure to heavy physical effort at work during 1996-2005 was estimated with JEM developed for this study population, where the exposure was based on occupational titles of the participants. We included all employees of the City of Helsinki, Finland, who had annual data of exposure for 8-10 years (1996-2005, n = 18387). The outcome variables were register-based, and the follow-up was from 2006 until 2015. The risk estimates were evaluated using competing risk survival analysis. RESULTS: There were 530 (3%) disability pension events due to musculoskeletal disorders during the 10-year follow-up. After adjustment for sex, age, education and chronic diseases, employees in the second (SHR = 1.46, 95% CI 1.05-2.05), third (SHR = 2.73, 95% CI 2.00-2.29), and the highest exposure quartile (SHR = 2.56, 95% CI 1.88-3.50) had a higher risk of musculoskeletal disability pension than employees in...
the lowest quartile. A total of 110 (4%) men and 266 (2%) women died during the follow-up. Men in the third quartile (SHR = 2.29, 95% CI 1.23-4.24), and women in the highest exposure quartile (SHR = 1.54, 95% CI 0.99-2.41) had a higher risk of premature mortality than those in the lowest quartile. CONCLUSIONS: Eight to ten years of exposure to heavy physical effort at work is strongly associated with disability pension due to musculoskeletal disorders. This exposure also increases the risk of premature mortality, particularly among men


Abstract: Objectives Bi-directional associations between perceived effort-reward imbalance (ERI) at work and neck-shoulder pain have been reported. There is also evidence of associations between ERI and depressive symptoms, and between depressive symptoms and pain while the links between ERI, depressive symptoms and pain have not been tested. We aimed to assess whether depressive symptoms mediate the association between ERI and neck-shoulder pain, as well as the association between neck-shoulder pain and ERI.

Methods We used prospective data from three consecutive surveys of the Swedish Longitudinal Occupational Survey of Health (SLOSH) study. ERI was assessed with a short version of the ERI questionnaire, and pain was defined as having had neck-shoulder pain that affected daily life during the past three months. Depressive symptoms were assessed with a continuous scale based on six-items of the (Hopkins) Symptom Checklist. Counterfactual mediation analyses were applied using exposure measures from 2010/2012 (T1), depressive symptoms from 2012/2014 (T2), and outcomes from 2014/2016 (T3), and including only those free of outcome at T1 and T2 (N=2876329). Results ERI was associated with a higher risk of neck-shoulder pain [risk ratio (RR) for total effect 1.22, 95% confidence interval (CI) 1.00-1.48] and 41% of this total effect was mediated through depressive symptoms. Corresponding RR for association between neck-shoulder pain and ERI was 1.34 (95% CI
but the mediating role of depressive symptoms was less consistent. Conclusions Depressive symptoms appear to be an intermediate factor in the relationship between ERI and neck-shoulder pain


Abstract: OBJECTIVES: Systematic reviews (SRs) of clinical practice guidelines (CPGs) are unique knowledge syntheses that require tailored approaches to, and greater subjectivity in, design and execution compared with other SRs in clinical epidemiology. We provide review authors structured direction on how to design and conduct methodologically rigorous SRs of CPGs. STUDY DESIGN AND SETTING: A guidance paper outlining suggested methodology for conducting all stages of an SR of CPGs. We present concrete examples of approaches used by published reviews, including a case exemplar demonstrating how this methodology was applied to our own SR of CPGs. RESULTS: Review context and the unique characteristics of CPGs as research syntheses or clinical guidance statements must be considered in all aspects of review design and conduct. Researchers should develop a "PICAR" statement to help form and focus on the research question(s) and eligibility criteria, assess CPG quality using a validated appraisal tool, and extract, analyze, and summarize data in a way that is cogent and transparent. CONCLUSION: SRs of CPGs can be used to systematically identify, assess, and summarize the current state of guidance on a clinical topic. These types of reviews often require methodological tailoring to ensure that their objectives and timelines are effectively and efficiently addressed; however, they should all meet the criteria for an SR, follow a rigorous methodological approach, and adhere to transparent reporting practices

Abstract: Purpose This study evaluates the Occupational Rehabilitation (OR) initiatives regarding return to work (RTW) and sustaining at work following work-related injuries. This study also identifies the predictors and predicts the likelihoods of RTW and sustainability for OR users. Methods The study is conducted on the compensation claim data for people who are injured at work in the state of Victoria, Australia. The claims which commenced OR services between the first of July 2012 and the end of June 2015 are included. The claims which used original employer services (OES) have been separated from claims which used new employer services (NES). We investigated a range of predictors categorised into four groups as claimant, injury, and employment characteristics and claim management. The RTW and sustaining at work are outcomes of interest. To evaluate the predictors, we use Chi-squared test and logistic regression modelling. Also, we prioritized the predictors using Akaike Information Criterion (AIC) measure and Cross-validation error. Four predictive models are developed using significant predictors for OES and NES users to predict RTW and sustainability. We examined the multicollinearity of the developed models using Variance Inflation Factor (VIF). Results About 75% and 60% of OES users achieved RTW and have been sustained at work respectively, whilst just approximately 30% of NES users have been placed at a new employer and 25% of them have been sustained at work. The predictors which have the most association with OES and NES outcomes are the use of psychiatric services and age groups respectively. We found that having mental conditions is as an important indicator to allocate injured workers into OES or NES initiatives. Our study shows that injured workers with mental issues do not always have lower RTW rate. They just need special consideration. Conclusion Understanding the predictors of RTW and sustainability helps to develop interventions to ensure sustained RTW. This study will assist decision makers to improve design and implementation of OR services and tailor services according to clients’ needs.

Lozano-Diez RV, Lopez-Zaldivar O, Herrero Del Cura S, and Verdu-Vazquez A. Analysis of the impact of health and safety
Abstract: The figure of the Health and Safety Coordinator (HSC), as a necessary and competent engineer in the construction sector, emerged in Spain on December 25, 1997 as a result of the implementation of European Directive 92/57/EEC. The coming of age of this figure is a sufficient period of time for determining its implementation and impact within the construction sector. The research carried out in this article arose from the analysis of statistical data obtained through Public Authorities and Professional Bodies. The quantitative study of the data extracted is complemented by the creation of specific benchmark indicators which connect four fundamental variables in the construction industry: the number of accidents, volume of workers employed, building units, and health and safety coordination posts. Furthermore, the legislation governing the HSC engineer in each of the 28 Member States of the European Union is studied. The results show a high implementation rate for the figure of the HSC, as well as a positive impact in relation to the reduced accident rate in the construction sector. Likewise, an update to the procedures of the various authorities is considered to be necessary in order to make the data concerning the actual work of the health and safety coordinators public. Finally, a review of the Spanish legislation concerning the HSC Coordinator is considered to be inevitable, in order to bring it up to the levels of professional skill and competence defined by the majority of European Union Member States.

Abstract: OBJECTIVES: Chronic bronchitis (CB) is an important chronic obstructive pulmonary disease (COPD)-related phenotype, with distinct clinical features and prognostic implications. Occupational exposures have been previously associated with increased risk of CB but few studies have examined this association.
prospectively using objective exposure assessment. We examined the effect of occupational exposures on CB incidence in the European Community Respiratory Health Survey. METHODS: Population samples aged 20-44 were randomly selected in 1991-1993, and followed up twice over 20 years. Participants without chronic cough or phlegm at baseline were analysed. Coded job histories during follow-up were linked to the ALOHA Job Exposure Matrix, generating occupational exposure estimates to 12 categories of chemical agents. Their association with CB incidence over both follow-ups was examined with Poisson models using generalised estimating equations. RESULTS: 8794 participants fulfilled the inclusion criteria, contributing 13 185 observations. Only participants exposed to metals had a higher incidence of CB (relative risk (RR) 1.70, 95% CI 1.16 to 2.50) compared with non-exposed to metals. Mineral dust exposure increased the incidence of chronic phlegm (RR 1.72, 95% CI 1.43 to 2.06). Incidence of chronic phlegm was increased in men exposed to gases/fumes and to solvents and in women exposed to pesticides. CONCLUSIONS: Occupational exposures are associated with chronic phlegm and CB, and the evidence is strongest for metals and mineral dust exposure. The observed differences between men and women warrant further investigation.

Malmivaara A. Generalizability of findings from randomized controlled trials is limited in the leading general medical journals. Journal of Clinical Epidemiology. 2019; 107:36-41. 
https://doi.org/10.1016/j.jclinepi.2018.11.014

Abstract: OBJECTIVES: To document reporting of study characteristics of randomized controlled trials (RCTs) in the four leading general medical journals and to appraise the generalizability of the evidence. STUDY DESIGN AND SETTING: All RCTs in BMJ, JAMA, Lancet, and NEJM from January 1, 2017 to September 30, 2017 were searched by hand, and data were extracted according to the benchmarking method. RESULTS: Hundred sixty-one RCTs were found; 67% assessed pharmacological therapy. The percentages of adequate documentation were patients' path before randomization 3% to 33% of trials; characteristics of the health care settings 0% to 75%; at least two comorbid conditions 25% to 50%; at least one measure was reported of functioning 42% to 54%, of behavioral
factors 25% to 58%, of environmental factors 3% to 25%, and of inequity-related factors 28% to 68%; cointerventions 6% to 25%; and reasons for dropping out of follow-up 39% to 100%. CONCLUSION: Almost all RCTs showed deficiencies in description of patient selection and study setting and in reporting of patient characteristics related to functioning, comorbidities, and to behavioral, environmental, and inequity factors. The findings indicate that generalizability of this evidence may be limited. The benchmarking method can be used for planning and appraisal of clinical trials and systematic reviews.


Related Report


Abstract: Objectives Short time between consecutive work shifts (quick returns, ie, \(<=11\) hours between shifts) is associated with sleepiness and fatigue, both of which have been linked to risk of injury. This paper aims to study quick returns between work shifts and risk of injury among Danish hospital workers. Method The study population included 69,200 employees, primarily working at hospitals, corresponding to 167,726 person years at risk between 2008-2015. Information on working hours was obtained from payroll data in the Danish Working Hour Database and linked, at an individual level, with data on 11,834 injury records identified in the National Patient Register and the Danish Register of Causes of Death. Multivariate Poisson regression models were used to calculate incidence rate ratios (IRR) with 95% confidence intervals (CI). Results Results showed the shorter the time between shifts, the higher the risk of injury. Thus, an elevated risk of injury was observed after quick returns compared with the standard 15-17 hours between shifts (IRR 1.39, 95% CI 1.23-1.58). Furthermore, when assessing the number of days since a quick return, the risk of injury was especially high within the first two days (day 1: IRR 1.39, 95% CI 1.23-1.58; day 2: IRR 1.39, 95% CI 1.21-1.58) following a quick return. Conclusions Our results suggest that quick returns increased the risk of injury, in particular within the first two days following a quick return. These findings point towards avoiding or reducing the number of quick returns in order to lower employees' risk of injury

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Abstract: BACKGROUND: Minnesota has an ethnically diverse labor force, with the largest number of refugees per capita in the United States. In recent years, Minnesota has been and continues to be a major site for immigrant and refugee resettlement in the United States, with a large population of both immigrant and native born Hmong, Hispanic, and East Africans. This study seeks to evaluate the injury risk among the evolving minority workforce in the Minnesota Twin Cities region. METHODS: A retrospective cohort study identifying work-related injuries following pre-employment
examinations was performed using electronic health records from a large multi-clinic occupational medicine practice. Preplacement examinations and subsequent work-related injuries were pulled from the electronic health record using representative ICD-10 codes for surveillance examinations and injuries. This study included patient records collected over a 2-year period from January 1, 2015, through December, 2016. The patients in this cohort worked in a wide-array of occupations including production, assembly, construction, law enforcement, among others. RESULTS: Hispanic minority workers were twice as likely to be injured at work compared with White workers. Hispanics were 2.89 times more likely to develop back injuries compared with non-Hispanic workers, and 1.86 times more likely to develop upper extremity injuries involving the hand, wrist, or elbow. CONCLUSION: Clinical practice data shows that Hispanic workers are at increased risk for work-related injuries in Minnesota. They were especially susceptible to back and upper extremity injuries. Lower injury rates in non-Hispanic minority workers, may be the result of injury underreporting and require further investigation.


Abstract: BACKGROUND: As India's accredited social health activist (ASHA) community health worker (CHW) programme enters its second decade, we take stock of the research undertaken and whether it examines the health systems interfaces required to sustain the programme at scale. METHODS: We systematically searched three databases for articles on ASHAs published between 2005 and 2016. Articles that met the inclusion criteria underwent analysis using an inductive CHW-health systems interface framework. RESULTS: A total of 122 academic articles were identified (56 quantitative, 29 mixed methods, 28 qualitative, and 9 commentary or synthesis); 44 articles reported on special interventions and 78 on the routine ASHA program. Findings on special interventions were overwhelmingly positive, with few negative or mixed results. In contrast, 55% of articles on the routine ASHA programme showed mixed findings and
23% negative, with few indicating overall positive findings, reflecting broader system constraints. Over half the articles had a health system perspective, including almost all those on general ASHA work, but only a third of those with a health condition focus. The most extensively researched health systems topics were ASHA performance, training and capacity-building, with very little research done on programme financing and reporting, ASHA grievance redressal or peer communication. Research tended to be descriptive, with fewer influence, explanatory or exploratory articles, and no predictive or emancipatory studies. Indian institutions and authors led and partnered on most of the research, wrote all the critical commentaries, and published more studies with negative results.

CONCLUSION: Published work on ASHAs highlights a range of small-scale innovations, but also showcases the challenges faced by a programme at massive scale, situated in the broader health system. As the programme continues to evolve, critical comparative research that constructively feeds back into programme reforms is needed, particularly related to governance, intersectoral linkages, ASHA solidarity, and community capacity to provide support and oversight.


Abstract: OBJECTIVES: To present a synopsis of evidence on the efficacy of rehabilitation after cervical disk surgery performed for neck pain and radiculopathy. DATA SOURCES: The databases of Medline, EMBASE, and Cochrane Central were searched for studies reporting effects of rehabilitation interventions in patients undergoing surgery due to cervical disk disease with pain and radicular syndrome, published before 31 August 2018. REVIEW METHODS: Project was registered with PROSPERO database (number CRD42018085937). Randomized controlled trials that evaluated the efficacy of rehabilitation interventions versus other, sham, or no treatment were selected. The primary outcomes were disability and pain. Secondary outcomes were other measures assessing biological, psychological or social effect of rehabilitation. Two reviewers independently screened studies for eligibility, assessed risk of bias and extracted data. Evaluation of evidence was performed
with the GRADE system. RESULTS:: Five papers were included in the review. The eligible studies were heterogeneous in intervention and outcome reporting. There are low- to very-low-quality evidence that some interventions (use of cervical collars after non-plated anterior cervical diskectomy an fusion, structured physiotherapy, and interactive patients' education) provide some benefit within functioning, pain, and selected psychological variables in patients undergoing cervical disk surgery. Controlled trials addressing comprehensive interdisciplinary rehabilitation, multidisciplinary pain management, occupational therapy, psychotherapy, social and vocational interventions were not identified. CONCLUSION:: There is insufficient evidence with few trials of low quality to allow any conclusion to be drawn about the effectiveness, harms, and general ineffectiveness of rehabilitation for people who have had cervical disk surgery for pain or radiculopathy


Abstract: Background Promoting healthy lifestyles at work should complement workplace safety programs. This study systematically investigates current states of occupational health and safety (OHS) policy as well as practice in the European Union (EU). Methods OHS policies of EU member states were categorized as either prevention or health promotion provisions using a manifest content analysis. Policy rankings were then created for each prevention and promotion. Rankings compared eight indicators from the European Survey of Enterprises on New and Emerging Risks-2 data on prevention and promotion practices for each member state using Chi-square and probit regression analyses. Results Overall, 73.1% of EU establishments take preventive measures against direct physical harm, and about 35.4% take measures to prevent psychosocial risks. Merely 29.5% have measures to promote health. Weak and inconsistent links between OHS policy and practice indicators were identified. Conclusion National OHS policies evidently concentrate on prevention while compliance with health and safety practices is relatively low. Psychosocial risks are often addressed in national policy but not implemented by institutions. Current risk assessment
methods are outdated-and often lack psychosocial indicators. Health promotion at work is rare in policy and practice, and its interpretation remains preventive. Member states need to adopt policies that actively improve health and well-being at the workplace

*IWH authored publications.*