IWH Research Alert
September 27, 2019

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Adhikary P, Keen S, and van Teijlingen E. Workplace accidents among Nepalis male workers in the middle east and Malaysia: a qualitative study. Journal of Immigrant & Minority Health. 2019; 21(5):1115-1122.
https://doi.org/10.1007/s10903-018-0801-y [open access]
Abstract: There are many Nepali men working in the Middle East and Malaysia and media reports and anecdotal evidence suggest a high risk of workplace-related accidents and injuries for male Nepali workers. Therefore, this study aims to explore the personal experiences of male Nepali migrants of unintentional injuries at their place of work. In-depth, face-to-face interviews (n = 20) were conducted with male Nepali migrant workers. Study participants were approached at Kathmandu International Airport, hotels and lodges around the airport. Interviews were transcribed and analysed using thematic analysis. Almost half of study participants experienced work-related accident abroad. The participants suggested that the reasons behind this are not only health and safety at work but also poor communication, taking risks by workers themselves, and perceived work pressure. Some participants experienced serious incidents causing life-long disability, extreme and harrowing accounts of injury but received no support from their employer or host countries. Nepali

migrant workers would appear to be at a high risk of workplace unintentional injuries owing to a number of interrelated factors poor health and safety at work, pressure of work, risk taking practices, language barriers, and their general work environment. Both the Government of Nepal and host countries need to be better policing existing policies, introduce better legislation where necessary, ensure universal health (insurance) coverage for labour migrants, and improve preventive measures to minimize the number and severity of accidents and injuries among migrant workers

Coggon D, Ntani G, Walker-Bone K, Felli VE, Harari F, Barrero LH, et al. Determinants of international variation in the prevalence of disabling wrist and hand pain. BMC Musculoskeletal Disorders. 2019; 20(1):436.
https://doi.org/10.1186/s12891-019-2791-x [open access]
Abstract: BACKGROUND: Previous research has indicated that wide international variation in the prevalence of disabling low back pain among working populations is largely driven by factors predisposing to musculoskeletal pain more generally. This paper explores whether the same applies to disabling wrist/hand pain (WHP). METHODS: Using data from the Cultural and Psychosocial Influences on Disability (CUPID) study, we focused on workers from 45 occupational groups (office workers, nurses and other workers) in 18 countries. Among 11,740 participants who completed a baseline questionnaire about musculoskeletal pain and potential risk factors, 9082 (77%) answered a further questionnaire after a mean interval of 14 months, including 1373 (15%) who reported disabling WHP in the month before follow-up. Poisson regression was used to assess associations of this outcome with baseline risk factors, including the number of anatomical sites other than wrist/hand that had been painful in the 12 months before baseline (taken as an index of general propensity to pain). RESULTS: After allowance for other risk factors, the strongest associations were with general pain propensity (prevalence rate ratio for an index >/=6 vs. 0: 3.6, 95% confidence interval 2.9-4.4), and risk rose progressively as the index increased. The population attributable fraction for a pain propensity index > 0 was 49.4%. The prevalence of disabling WHP by occupational group ranged from 0.3 to 36.2%, and correlated strongly with mean pain propensity index (correlation coefficient 0.86). CONCLUSION:

Strategies to prevent disability from WHP among working populations should explore ways of reducing general propensity to pain, as well as improving the ergonomics of occupational tasks

Denis D, Gonella M, Comeau M, and Lauzier M. Why doesn't training based on safe handling techniques work? A critical review of the literature. Report no: R-1050. Montréal, Québec: The Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST); 2019.
https://www.irsst.qc.ca/media/documents/PubIRSST/R-1050.pdf?v=2019-05-07

Espinoza-Castro B, Vasquez Rueda LE, Mendoza Lopez RV, and Radon K. Working below skill level as risk factor for distress among Latin American migrants living in Germany: a cross-sectional study. Journal of Immigrant & Minority Health. 2019; 21(5):1012-1018.
https://doi.org/10.1007/s10903-018-0821-7
Abstract: About 84,710 Latin American migrants currently live in Germany. Knowledge about their work situation in relation to their skill level and its association with mental health is limited. Therefore, the aims of this study were to assess the prevalence of working below skill level and its association with the prevalence of distress in Latin Americans living in Germany. This cross-sectional study included a convenience sample of 282 Latin American migrants living in Germany. Participants were recruited by a short online (Facebook, personal contacts) or interview-based questionnaire from November 2015 to April 2016. Questions included skill level, job category (categorized by ISCO 2008 code), socio-demographics, violence at the workplace and distress. The latter was assessed by Goldberg's General Health Questionnaire using a cut-off of 4/5. Descriptive statistics were followed by logistic regression analyses adjusting for potential confounders. About half of the study population reported symptoms of distress (45%). 63% of the population worked below skill level. 12-months prevalence of violence at the workplace was 14%. After adjustment, working below skill level was statistically significantly related to distress (odds ratio 2.80; 95% confidence interval 1.58-4.95). Working below skill level is common in Latin

American migrants in Germany and may result in poor psychosocial well-being

Greig MA, Village J, Dixon SM, Salustri FA, and Neumann WP. Assessing human factors and ergonomics capability in organisations: the Human Factors Integration Toolset. Ergonomics. 2019; 62(10):1254-1272. https://doi.org/10.1080/00140139.2019.1572228

Abstract: This paper presents the development of a tool that allows an organisation to assess its level of human factors (HF) and ergonomics integration and maturity within the organisation. The Human Factors Integration Toolset (available at: https://www.researchgate.net/project/Human-Factors-Integration-Toolset) has been developed and validated through a series of workshops with 45 participants from industry and academia and through industry partnered field-testing. HF maturity is assessed across five levels in 16 organisational functions based on any of 31 discrete elements contributing to HF. Summing element scores in a function determines a percent of ideal HF for the function. Industry stakeholders engaged in field-testing found the tool helped to establish the status of HF in the organisation, plan projects to further develop HF capabilities, and initiate discussions on HF for performance and well-being. Improvement suggestions included adding an IT function, refining the language for non-HF specialists, including knowledge work and creating a digital version to improve usability. Practitioner summary: A tool scoring HF capability in 16 organisation functions has been developed collaboratively. Industry stakeholders expressed a need for the tool and provided validation of tool design decisions. Field-testing improved tool usability and showed that beyond scoring HF capability, the tool created opportunities for discussions of HF-related improvement possibilities. Abbreviations: HF: human factors; HFIT: Human Factors Integration Toolset

Grzywacz JG, Gonzales-Backen M, Liebman A, Marin AJ, Trejo M, Gudino CO, et al. Attending to pesticide exposure and heat illness among farmworkers: results from an attention placebo-controlled evaluation design. Journal of Occupational & Environmental Medicine. 2019; 61(9):735-742.

https://doi.org/10.1097/JOM.0000000000001650
Abstract: OBJECTIVE: The aim of this study was to determine the effectiveness of curricula for improving knowledge and attitudes pertaining to pesticide exposure and heat illness among immigrant Latino farmworkers. METHODS: A pesticide safety curriculum informed by the revised Worker Protection Standard (WPS) was tested against an attention placebo-controlled curriculum (heat illness) in a sample of Latino farmworkers (N = 127). RESULTS: Pesticide safety knowledge increased in the overall sample, but did not differ by curriculum assignment. Pesticide safety behavioral intentions increased among participants in the pesticide safety curriculum but decreased among those in the other curriculum ($P < 0.05$). Heat illness knowledge and behavioral intentions increased more for farmworkers assigned to the heat illness than the pesticide safety curriculum. CONCLUSION: The developed curricula show good promise for meeting the spirit of the revised WPS and for reducing the burden of heat-related fatality and morbidity among Latino farmworkers

Katz AS, Pronk NP, McLellan D, Dennerlein J, and Katz JN. Perceived workplace health and safety climates: associations with worker outcomes and productivity. American Journal of Preventive Medicine. 2019; 57(4):487-494.
https://doi.org/10.1016/j.amepre.2019.05.013
Abstract: INTRODUCTION: This study investigates the associations between perceived workplace health and safety climates and a variety of worker and employer outcomes. METHODS: Self-reported data were collected from an employee health assessment offered at 3 companies (n=959) in 2014. Independent variables included 2 climate variables: perceived safety climate and perceived health and well-being climate. Logistic regression models, performed in 2016-2017, explored the associations between the 2 climate variables and 3 sets of outcomes: worker outcomes, worker health behaviors, and employer outcomes. RESULTS: Perceived workplace safety climate was positively associated with physical activity and optimal sleep. Stronger perceived workplace health and well-being and safety climates were related to less depression, higher job and life satisfaction, less back pain, and higher general health. Stronger perceived climates of workplace safety and health and well-being

were associated with less productivity loss. CONCLUSIONS: Conditions of work, such as perceived climate, are associated with improved worker behaviors (physical activity and sleep), worker outcomes (depression, job and life satisfaction, back pain, and general health), and employer (productivity) outcomes

Lagisetty PA, Lin LA, Ganoczy D, Haffajee RL, Iwashyna TJ, and Bohnert ASB. Opioid prescribing after opioid-related inpatient hospitalizations by diagnosis: a cohort study. Medical Care. 2019; 57(10):815-821.
https://doi.org/10.1097/MLR.0000000000001182
Abstract: BACKGROUND: Any opioid-related hospitalization is an indicator of opioid-related harm and should ideally trigger carefully monitored decreases in opioid prescribing after inpatient stays in many, if not most, cases. However, past studies on opioid prescribing after hospitalizations have largely been limited to overdose related visits. It is unclear whether prescribing is different for other opioid-related indications such as opioid dependence and abuse and how that may compare with hospitalizations for overdose. OBJECTIVE: To examine opioid-prescribing patterns before and after opioid-related hospitalizations for all opioid-related indications, not limited to overdose. RESEARCH DESIGN: Retrospective cohort analysis of Veterans Health Administration (VHA) administrative claims from 2011 to 2014. SUBJECTS: VHA patients who were hospitalized between fiscal years 2011 and 2014 and had at least 1 prescription opioid medication filled through the VHA pharmacy before their hospitalization. MEASURES: Opioid dispensing trajectories after hospitalization by opioid-related indication (ie, opioid dependence and/or abuse vs. overdose) compared with prescribing patterns for non-opioid-related hospitalizations. RESULTS: Overall, opioid dosage dropped significantly (66% for dependence/abuse, 42% for overdose, and 3% for nonopioid diagnoses; P<0.001) across all 3 categories when comparing dose 57-63 days after admission to 57-63 days before hospitalization. However, 47% of the patients remained on the same dose or increased their opioid dose at 60 days after an opioid-related hospitalization. After adjusting for covariates, patients with a primary diagnosis of dependence/abuse had higher odds of having their dose discontinued compared with those with overdose: odds ratio (OR) 2.17 (1.19-3.96). Patients with admissions for opioid

dependence and/or abuse had a statistically significant higher prevalence of depression, posttraumatic stress disorder, anxiety, and substance use disorders compared with those with an opioid overdose hospitalization. CONCLUSIONS: Opioid prescribing and patient risk factors before and after opioid-related hospitalizations vary by indication for hospitalization. To reduce costs and morbidity associated with opioid-related hospitalizations, opioid deintensification efforts need to be tailored to indication for hospitalization

Locock L and Boaz A. Drawing straight lines along blurred boundaries: qualitative research, patient and public involvement in medical research, co-production and co-design. Evidence & Policy. 2019; 15(3):409-421.
https://doi.org/10.1332/174426419X15552999451313

Mongeau S, Lightfoot N, MacEwan L, and Eger T. Mining-related lower back injuries and the compensation process: an injured worker's journey. Workplace Health & Safety. 2019; [Epub ahead of print].
https://doi.org/10.1177/2165079919870827
Abstract: Background: In Ontario, when an occupational injury occurs in the mining industry, there is often a need to interact with the Workplace Safety and Insurance Board (WSIB). During this process, miners experience economic, social, and mental health-related issues that can affect their overall well-being. This study aimed to determine the impact of a lower back injury and the WSIB claim process experience expressed by some male, underground miners in Sudbury, Ontario, Canada. Methods: A qualitative descriptive study design that utilized in-depth, individual qualitative interviews was conducted. Twelve male participants (underground miners) were interviewed in Sudbury, Ontario. Interviews were transcribed and thematically analyzed. Findings: The results emphasized the need for improved communication, the necessity for resources to be allocated to enhance public discussion about injury prevention, the social and economic burden that miners and their families face, and the power imbalances between injured miners and the companies that were meant to support them. Conclusion/Application to Practice: The findings indicate that several areas require improvement for an

injured miner who submits a WSIB claim. Ideally, participants wanted an improved and streamlined process for reporting an injury and for WSIB claim management. These findings suggest that occupational health practices that foster a safe and healthy work environment in the mining industry must be promoted, which will help to guide future policies that enhance support for an injured worker and the WSIB claim process

Occupational Cancer Research Centre. Burden of occupational cancer in Canada: major workplace carcinogens and prevention of exposure. Toronto: Occupational Cancer Research Centre; 2019.

Potvin Jim R and Potvin Aidan W. Ergonomics demands associated with combinations of manual and powered emergency medical service cots and ambulance loading systems: a work simulation study. International Journal of Industrial Ergonomics. 2019; 73:102831. https://doi.org/10.1016/j.ergon.2019.102831
Abstract: Digital human models were used to perform a virtual ergonomics assessment of manual and powered emergency medical services cots combined with both manual and powered ambulance loading systems. Simulations were run with all combinations of emergency medical technicians (EMTs), at 50ΓÇ»kg (female), 72ΓÇ»kg (female) and 125Γ Ç»kg (male) with cots containing no patient and patients of 125ΓÇ»kg and 159ΓÇ»kg. There was a substantial decrease in low back and upper extremity demands with the use of a powered cot, and a further decrease with the additional use of a powered loading system, even though it only required one EMT. The benefits of a fully powered system were magnified with the simulation of both heavier EMTs and patients. Additionally, this study demonstrates the utility of digital human models and work simulation to evaluate product designs that impact occupational demands and injury risk

Tinitali S, Bowles KA, Keating JL, and Haines T. Sitting posture during occupational driving causes low back pain; evidence-based position or dogma? A systematic review. Human Factors. 2019; [Epub ahead of print].

https://doi.org/10.1177/0018720819871730
Abstract: OBJECTIVE: In this review, we determine if there is evidence to demonstrate a relationship between occupational driving posture and low back pain. BACKGROUND: The burden of low back pain is increasing. An understanding of this relationship is required to enable the development of recommendations for clinicians and policy-makers for the driving industry. METHOD: Five databases were searched up to March 12, 2018. Study quality was assessed using the National Heart, Lung, and Blood Institute's Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies, followed by a GRADE analysis to consider the evidence as a whole. A narrative, critical synthesis was completed that considered the methods by which driving posture and low back pain were measured and analyzed. RESULTS: There were 653 articles identified, with seven eligible for review. Four articles identified an association between occupational driving posture and low back pain, yet this was based on the use of measurement tools lacking validity. Although a relationship may exist, the specific driving postures associated with low back pain and the strength of this relationship have not been confirmed. CONCLUSION: Future research needs to employ validated and reliable, real-time qualitative methods for measuring occupational driving posture to advance our understanding of this relationship. APPLICATION: Clinical and policy recommendations regarding driving posture and low back pain should be used with caution, as they are guided by evidence incorporating bias. Future studies are required to confirm the specific postures assumed while occupational driving and their relationship with low back pain, before recommendations can be made

Vuokko A, Karvala K, Suojalehto H, Lindholm H, Selinheimo S, Heinonen-Guzejev M, et al. Clinical characteristics of disability in patients with indoor air-related environmental intolerance. Safety and Health at Work. 2019; 10(3):362-369.
https://doi.org/10.1016/j.shaw.2019.06.003 [open access]
Abstract: Background: Chronic nonspecific symptoms attributed to indoor nonindustrial work environments are common and may cause disability, but the medical nature of this disability is unclear. The aim was to medically characterize the disability manifested by chronic, recurrent symptoms and restrictions to work participation attributed to

low-level indoor pollutants at workplace and whether the condition shares features with idiopathic environmental intolerance. Methods: We investigated 12 patients with indoor air-related work disability. The examinations included somatic, psychological, and psychiatric evaluations as well as investigations of the autonomic nervous system, cortisol measurements, lung function, and allergy tests. We evaluated well-being, health, disability, insomnia, pain, anxiety, depression, and burnout via questionnaires. Results: The mean symptom history was 10.5 years; for disabling symptoms, 2.7 years. Eleven patients reported reactions triggered mainly by indoor molds, one by fragrances only. Ten reported sensitivity to odorous chemicals, and three, electric devices. Nearly all had co-occurrent somatic and psychiatric diagnoses and signs of pain, insomnia, burnout, and/or elevated sympathetic responses. Avoiding certain environments had led to restrictions in several life areas. On self-assessment scales, disability showed higher severity and anxiety showed lower severity than in physician assessments. Conclusion: No medical cause was found to explain the disability. Findings support that the condition is a form of idiopathic environmental intolerance and belongs to functional somatic syndromes. Instead of endless avoidance, rehabilitation approaches of functional somatic syndromes are applicable

Wilson MG, Nidumolu A, Berditchevskaia I, Gauvin FP, Abelson J, and Lavis JN. Identifying approaches for synthesizing and summarizing information to support informed citizen deliberations in health policy: a scoping review. Journal of Health Services Research & Policy. 2019; [Epub ahead of print]. https://doi.org/10.1177/1355819619872221