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***Furlan AD, Irvin E, Munhall C, Giraldo-Prieto M, Fullerton L, McMaster R, Danak S, Costante A, Pitzul KB, Bhide RP, Marchenko S, Mahood Q, David JA, Flannery JF, and Bayley M. Rehabilitation service models for people with physical and/or mental disability living in low- and middle-income countries: a systematic review. *Journal of Rehabilitation Medicine*. 2018; [Epub ahead of print].**

<http://dx.doi.org/10.2340/16501977-2325> [open access]

Abstract: OBJECTIVE: To compare models of rehabilitation services for people with mental and/or physical disability in order to determine optimal models for therapy and interventions in low- to middle-income countries. DATA SOURCES: CINAHL, EMBASE, MEDLINE, CENTRAL, PsycINFO, Business Source Premier, HINARI, CEBHA and PubMed. STUDY SELECTION: Systematic reviews, randomized control trials and observational studies comparing >2 models of rehabilitation care in any language. Data extraction: Standardized forms were used. Methodological quality was assessed using AMSTAR and quality of evidence was assessed using GRADE. DATA SYNTHESIS: Twenty-four systematic reviews which included 578 studies and 202,307 participants were selected. In addition, four primary studies were included to complement the gaps in the systematic reviews. The studies were all done at various countries. Moderate- to high-quality evidence supports the following models of rehabilitation services: psychological intervention in primary care settings for people with major depression, admission into an inpatient, multidisciplinary, specialized rehabilitation unit for those with recent onset of a severe disabling condition; outpatient rehabilitation with multidisciplinary care in the community, hospital or home is recommended for less severe conditions; However, a model of rehabilitation service that includes early discharge is not recommended for

elderly patients with severe stroke, chronic obstructive pulmonary disease, hip fracture and total joints. CONCLUSION: Models of rehabilitation care in inpatient, multidisciplinary and specialized rehabilitation units are recommended for the treatment of severe conditions with recent onset, as they reduce mortality and the need for institutionalized care, especially among elderly patients, stroke patients, or those with chronic back pain. Results are expected to be generalizable for brain/spinal cord injury and complex fractures

***Furlan AD and Williamson OD. Response to "Role of regulators in safe prescribing of opioids". CMAJ. 2017; 189(37):E1196.**

<http://dx.doi.org/10.1503/cmaj.733208>

***Schnitzler L, Kosny A, and Lifshen M. Healthcare providers' experience with the management of mental health conditions in the context of Workers' Compensation. Work. 2018; 59(3):449-462.**

<http://dx.doi.org/10.3233/WOR-182695>

Abstract: BACKGROUND: Little is known about how healthcare providers (HCPs) in Canada manage mental health claims and the return to work (RTW) of injured workers OBJECTIVE: To examine HCPs' experience and challenges on the treatment of mental health conditions (MHCs) in the context of Workers' Compensation (WC) processes and their involvement in RTW. METHODS: Ninety-seven interviews with HCPs (general practitioners, n = 59; allied HCPs, n = 19; specialists, n = 19) were conducted in British Columbia, Manitoba, Ontario and Newfoundland. A thematic content analysis was used to analyze interviews. RESULTS: HCPs reported that while RTW is extolled at virtually all costs by WC boards, they did not always see it as beneficial. Most HCPs were convinced that successful recovery and RTW depend on being aware of how mental and physical health is intertwined and treating both issues. Organizational barriers within WC processes and adversarial relationships between injured workers (IWs) and WC boards made it difficult for HCPs to adequately treat patients and facilitate RTW. Dealing with IWs' MHCs and their emotional distress due to 'going through WC systems' was challenging. CONCLUSIONS: WC boards must identify how policies can be modified to mitigate compensation processes and RTW for WC claimants with MHC

Caban-Martinez AJ, Santiago KM, Stillman J, Moore KJ, Sierra DA, Chalmers J, Baniak M, and Jordan MM. Physical exposures, work tasks, and OSHA-10 training among temporary and payroll construction workers. Journal of Occupational & Environmental Medicine. 2018; 60(4):e159-e165.

<http://dx.doi.org/10.1097/JOM.0000000000001267>

Abstract: OBJECTIVE: We characterize and compare the self-reported physical exposures, work tasks, and OSHA-10 training in a non-probabilistic sample of temporary and payroll construction workers. METHODS: In June 2016, a total of 250 payroll and temporary general laborers employed at Florida construction sites completed a survey at the job site as part of the falls reported among minority employees (FRAME) study. RESULTS: Workers employed through temp

agencies (57.1%) were significantly more likely to report moving or lifting materials more than 100 pounds than payroll workers (38.5%; $P < 0.01$). Temporary construction workers with 10-hour OSHA training (22.2%) spent significantly less time with intense hand use/awkward hand posture than temporary workers without 10-hour OSHA training (46.9%; $P = 0.048$). CONCLUSIONS: Temp construction workers with OSHA 10-hour training reported less hazardous physical postures than workers without the same training

Cortes-Franch I, Escriba-Aguir V, Benach J, and Artazcoz L. Employment stability and mental health in Spain: towards understanding the influence of gender and partner/marital status. BMC Public Health. 2018; 18(1):425. <http://dx.doi.org/10.1186/s12889-018-5282-3> [open access]

Abstract: BACKGROUND: The growing demand for labour flexibility has resulted in decreasing employment stability that could be associated with poor mental health status. Few studies have analysed the whole of the work force in considering this association since research on flexible forms of employment traditionally analyses employed and unemployed people separately. The gender division of work, and family characteristics related to employment situation, could modify its association with mental wellbeing. The objective of the study was to examine the relationship between a continuum of employment stability and mental health taking into account gender and partner/marital status. METHODS: We selected 6859 men and 5106 women currently salaried or unemployed from the 2006 Spanish National Health Survey. Employment stability was measured through a continuum from the highest stability among employed to lowest probability of finding a stable job among the long-term unemployed. Mental health was measured with the 12-item version of the General Health Questionnaire. Logistic regression models were fitted for each combination of partner/marital status and gender. RESULTS: In all groups except among married women employment stability was related to poor mental health and a gradient between a continuum of employment stability and mental health status was found. For example, compared with permanent civil servants, married men with temporary contract showed an aOR = 1.58 (95%CI = 1.06-2.35), those working without a contract aOR = 2.15 (95%CI = 1.01-4.57) and aOR = 3.73 (95%CI = 2.43-5.74) and aOR = 5.35 (95%CI = 2.71-10.56) among unemployed of up to two years and more than two years, respectively. Among married and cohabiting people, the associations were stronger among men. Poor mental health status was related to poor employment stability among cohabiting women but not among married ones. The strongest association was observed among separated or divorced people. CONCLUSIONS: There is a rise in poor mental health as the distance from stable employment grows. This result differs according to the interaction with gender and partner/marital status. In Spain this relationship seems to follow a pattern related to the gender division of work in married people but not in other partner/marital situations. Family and

socioeconomic context can contribute to explain previous mixed results. Recommendations for research and for action are given

Dasgupta N, Beletsky L, and Ciccarone D. Opioid crisis: no easy fix to its social and economic determinants. American Journal of Public Health. 2018; 108(2):182-186.

<http://dx.doi.org/10.2105/AJPH.2017.304187> [open access]

Abstract: The accepted wisdom about the US overdose crisis singles out prescribing as the causative vector. Although drug supply is a key factor, we posit that the crisis is fundamentally fueled by economic and social upheaval, its etiology closely linked to the role of opioids as a refuge from physical and psychological trauma, concentrated disadvantage, isolation, and hopelessness. Overreliance on opioid medications is emblematic of a health care system that incentivizes quick, simplistic answers to complex physical and mental health needs. In an analogous way, simplistic measures to cut access to opioids offer illusory solutions to this multidimensional societal challenge. We trace the crisis' trajectory through the intertwined use of opioid analgesics, heroin, and fentanyl analogs, and we urge engaging the structural determinants lens to address this formidable public health emergency. A broad focus on suffering should guide both patient- and community-level interventions

Huang X, Keyes KM, and Li G. Increasing prescription opioid and heroin overdose mortality in the United States, 1999-2014: an age-period-cohort analysis. American Journal of Public Health. 2018; 108(1):131-136.

<http://dx.doi.org/10.2105/AJPH.2017.304142>

Abstract: OBJECTIVES: To assess cohort effects in prescription opioid and heroin overdose mortality in the United States. METHODS: Using the National Center for Health Statistics' multiple-cause-of-death file for 1999 to 2014, we performed an age-period-cohort analysis of drug overdose mortality in the United States. RESULTS: Compared with those born in 1977 and 1978, individuals born between 1947 and 1964 experienced excess risks of prescription opioid overdose death (e.g., for the 1955-1956 birth cohort, rate ratio [RR] = 1.27; 95% confidence interval [CI] = 1.09, 1.48) and of heroin overdose death (e.g., for the 1953-1954 birth cohort, RR = 1.32; 95% CI = 1.11, 1.57). Those born between 1979 and 1992 also experienced an increased risk of heroin overdose death (e.g., for the 1989-1990 birth cohort, RR = 1.23; 95% CI = 1.01, 1.50). The cohort effects were consistent between sexes. CONCLUSIONS: Individuals born between 1947 and 1964 and between 1979 and 1992 are particularly afflicted by the opioid epidemic. Intervention programs are needed to reduce the excess overdose mortality in these specific demographic groups

Lindsay S, Cagliostro E, Albarico M, Mortaji N, and Karon L. A systematic review of the benefits of hiring people with disabilities. Journal of Occupational Rehabilitation. 2018; [Epub ahead of print].

<http://dx.doi.org/10.1007/s10926-018-9756-z>

Abstract: Purpose We reviewed literature on the benefits of hiring people with

disabilities. Increasing attention is being paid to the role of people with disabilities in the workplace. Although most research focuses on employers' concerns, many companies are now beginning to share their successes. However, there is no synthesis of the peer-reviewed literature on the benefits of hiring people with disabilities. Methods Our team conducted a systematic review, completing comprehensive searches of seven databases from 1997 to May 2017. We selected articles for inclusion that were peer-reviewed publications, had a sample involving people with disabilities, conducted an empirical study with at least one outcome focusing on the benefits of hiring people with disabilities, and focused on competitive employment. Two reviewers independently applied the inclusion criteria, extracted the data, and rated the study quality. Results Of the 6176 studies identified in our search, 39 articles met our inclusion criteria. Findings show that benefits of hiring people with disabilities included improvements in profitability (e.g., profits and cost-effectiveness, turnover and retention, reliability and punctuality, employee loyalty, company image), competitive advantage (e.g., diverse customers, customer loyalty and satisfaction, innovation, productivity, work ethic, safety), inclusive work culture, and ability awareness. Secondary benefits for people with disabilities included improved quality of life and income, enhanced self-confidence, expanded social network, and a sense of community. Conclusions There are several benefits to hiring people with disabilities. Further research is needed to explore how benefits may vary by type of disability, industry, and job type

Lopes SL, Ferreira AI, Passos AM, Neves M, Sousa C, and Sa MJ. Depressive symptomatology, presenteeism productivity, and quality of life: a moderated mediation model. Journal of Occupational & Environmental Medicine. 2018; 60(4):301-308.

<http://dx.doi.org/10.1097/JOM.0000000000001253>

Abstract: : In this study, we intend to test if presenteeism productivity influences the relationship between depressive symptoms and quality of life and also if this relation is conditional upon levels of information processing speed. Data were collected from 231 participants who completed a neuropsychological test and self-reported measures. Results revealed a significant indirect effect and a significant moderation effect. The association between depressive symptoms and presenteeism productivity was moderated by information processing speed only in their medium and high levels. Our findings suggest that individuals with higher levels of processing speed may have more difficulty in focusing on work without being distracted by health problems. The present investigation has made a significant contribution to the existing literature about cognitive function and productivity in workers with depressive symptomatology and its effects on their quality of life

Pulakka A, Stenholm S, Bosma H, Schaper NC, Savelberg HHCM, Stehouwer CDA, van der Kallen CJH, Dagnelie PC, Sep SJS, and Koster A. Association between employment status and objectively measured

physical activity and sedentary behavior: the Maastricht study. Journal of Occupational & Environmental Medicine. 2018; 60(4):309-315.

<http://dx.doi.org/10.1097/JOM.0000000000001254>

Abstract: OBJECTIVE: To examine the association between employment status and physical activity and sedentary behavior. METHODS: We included 2045 participants from The Maastricht Study, who used a thigh-worn accelerometer. We compared time spent sedentary, standing, stepping, and higher intensity physical activity between participants with different employment status (non-employed or low-, intermediate- or high-level occupation) with analysis of variance. RESULTS: Participants in low-level occupations were less sedentary and standing and stepping more than those in other occupational categories and non-employed participants. Among the employed, the differences were mostly observed on weekdays, whereas the differences in sedentary time and standing between those in low-level occupations and non-employed participants were evident both on weekdays and weekend days. CONCLUSIONS: Those in low-level occupational category were less sedentary and more active than non-employed and those in other occupational categories, especially on weekdays

Roquelaure Y, Fouquet N, Chazelle E, Descatha A, Evanoff B, Bodin J, and Petit A. Theoretical impact of simulated workplace-based primary prevention of carpal tunnel syndrome in a French region. BMC Public Health. 2018; 18(1):426.

<http://dx.doi.org/10.1186/s12889-018-5328-6> [open access]

Abstract: BACKGROUND: Carpal tunnel syndrome (CTS) is the most common nerve entrapment neuropathy in the working-age population. The reduction of CTS incidence in the workforce is a priority for policy makers due to the human, social and economic costs. To assess the theoretical impact of workplace-based primary interventions designed to reduce exposure to personal and/or work-related risk factors for CTS. METHODS: Surgical CTS were assessed using regional hospital discharge records for persons aged 20-59 in 2009. Using work-related attributable fractions (AFEs), we estimated the number of work-related CTS (WR-CTS) in high-risk jobs. We simulated three theoretical scenarios of workplace-based primary prevention for jobs at risk: a mono-component work-centered intervention reducing the incidence of WR-CTS arbitrarily by 10% (10%-WI), and multicomponent global interventions reducing the incidence of all surgical CTS by 5% and 10% by targeting personal and work risk factors. RESULTS: A limited proportion of CTS were work-related in the region's population. WR-CTS were concentrated in nine jobs at high risk of CTS, amounting to 1603 [1137-2212] CTS, of which 906 [450-1522] were WR-CTS. The 10%-WI, 5%-GI and 10%-GI hypothetically prevented 90 [46-153], 81 [58-111] and 159 [114-223] CTS, respectively. The 10%-GI had the greatest impact regardless of the job. The impact of the 10%-WI interventions was high only in jobs at highest risk and AFEs (e.g. food industry jobs). The 10%-WI and 5%-GI had a similar impact for moderate-risk jobs (e.g. healthcare jobs). CONCLUSION: The impact of simulated workplace-based interventions suggests

that prevention efforts to reduce exposure to work-related risk factors should focus on high-risk jobs. Reducing CTS rates will also require integrated strategies to reduce personal risk factors, particularly in jobs with low levels of work-related risk of CTS

Schwartz B, Kapellusch JM, Schrempf A, Probst K, Haller M, and Baca A. Effect of alternating postures on cognitive performance for healthy people performing sedentary work. *Ergonomics*. 2018; 61(6):778-795.

<http://dx.doi.org/10.1080/00140139.2017.1417642>

Abstract: Prolonged sitting is a risk factor for several diseases and the prevalence of worksite-based interventions such as sit-to-stand workstations is increasing. Although their impact on sedentary behaviour has been regularly investigated, the effect of working in alternating body postures on cognitive performance is unclear. To address this uncertainty, 45 students participated in a two-arm, randomised controlled cross-over trial under laboratory conditions. Subjects executed validated cognitive tests (working speed, reaction time, concentration performance) either in sitting or alternating working postures on two separate days (ClinicalTrials.gov Identifier: NCT02863731). MANOVA results showed no significant difference in cognitive performance between trials executed in alternating, standing or sitting postures. Perceived workload did not differ between sitting and alternating days. Repeated measures ANOVA revealed significant learning effects regarding concentration performance and working speed for both days. These results suggest that working posture did not affect cognitive performance in the short term. Practitioner Summary: Prior reports indicated health-related benefits based on alternated (sit/stand) body postures. Nevertheless, their effect on cognitive performance is unknown. This randomised controlled trial showed that working in alternating body postures did not influence reaction time, concentration performance, working speed or workload perception in the short term

Stahl C and Andersson F. Shifting to value-based principles in sickness insurance: challenges in changing roles and culture. *Journal of Occupational Rehabilitation*. 2018; [Epub ahead of print].

<http://dx.doi.org/10.1007/s10926-018-9759-9>

Abstract: Purpose Management principles in insurance agencies influence how benefits are administered, and how return to work processes for clients are managed and supported. This study analyses a change in managerial principles within the Swedish Sickness Insurance Agency, and how this has influenced the role of insurance officials in relation to discretion and accountability, and their relationship to clients. Methods The study is based on a qualitative approach comprising 57 interviews with officials and managers in four insurance offices. Results The reforms have led to a change in how public and professional accountability is defined, where the focus is shifted from routines and performance measurements toward professional discretion and the quality of encounters. However, the results show how these changes are interpreted

differently across different layers of the organization, where New Public Management principles prevail in how line managers give feedback on and reward the work of officials. Conclusions The study illustrates how the introduction of new principles to promote officials' discretion does not easily bypass longstanding management strategies, in this case managing accountability through top-down performance measures. The study points out the importance for public organizations to reconcile new organizational principles with the current organizational culture and how this is manifested through managerial styles, which may be resistant to change. Promoting client-oriented and value-driven approaches in client work hence needs to acknowledge the importance of organizational culture, and to secure that changes are reflected in organizational procedures and routines

*IWH authored publications.