IWH Research Alert July 12, 2019

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*Jetha A, Yanar B, Lay AM, and Mustard C. Work disability management communication bottlenecks within large and complex public service organizations: a sociotechnical systems study. Journal of Occupational Rehabilitation. 2019; [Epub ahead of print].

https://doi.org/10.1007/s10926-019-09836-3

Abstract: Purpose Within large and complex organizations work disability (WD) communication bottlenecks emerge and contribute to avoidable disability days. Our study utilized soft systems methods to better understand communication problems in WD management. Methods Semi-structured interviews were conducted with disability case managers (n = 10), frontline supervisors (n = 15) and human resource/labor relations specialists (n = 5) within three public service organizations. Interview questions asked about organizational WD system structure and communication practices. Thematic analysis was conducted to examine system structure and emergent communication bottlenecks. Results WD communication took place across a number of internal and external stakeholders. Communication bottlenecks tended to concentrate within WD case manager and frontline supervisor activities. Inconsistent communication across organizations, challenges interacting with external stakeholders, mental health disability information exchange, lack of WD communication experience and previous worker performance represented communication bottlenecks that contributed to avoidable disability days. Conclusions To strengthen communication practices, systems-focused responses towards organizational WD management are required

*McGuire C, Kristman VL, Martin L, and Bedard M. The association between depression and traumatic brain injury in older adults: a nested matched case control study. Journal of Aging and Health. 2018; 30(7):1156-1168.

https://doi.org/10.1177/0898264317708072

Abstract: OBJECTIVE: Determine association between depression and traumatic brain injury (TBI) in the older adult home care population of Ontario, Canada (2003-2013). METHOD: A nested matched case control study was used, and data were retrieved for service users 65 years or older who received home care between 2003 and 2013. Incident TBI cases were matched to four controls by sex, age, and assessment date. Odds ratios and multivariable conditional logistic regression were completed. RESULTS: 554,313 service users were included of which 5,215 (0.9%) had a TBI and 39,048 (7.0%) had depression. Fall history was an effect modifier. The association between depression and TBI was 1.10 (95%) confidence interval [CI] = [0.93, 1.31]) for those without a history of falling, while for those with a history of falling it was 1.24 (95% CI = [1.03, 1.48]) after adjusting for education and Alzheimer's disease. DISCUSSION: Depression is associated with sustaining a TBI in those with a history of falling

Ablah E, Wilcox EA, and Honn A. The cons of traditional worksite wellness interventions and a proposed model. Public Health Reports. 2019; 134(4):319-323. https://doi.org/10.1177/003335491984568

Alnaser MZ and Aljadi SH. Physical therapists with work-related musculoskeletal disorders in the State of Kuwait: a comparison across countries and health care professions. Work. 2019; 63(2):261-268.

https://doi.org/10.3233/WOR-192927

Abstract: BACKGROUND: In the US, as the demands for

rehabilitation services increase, work-related musculoskeletal disorders (WMSDs) have increased among rehabilitation practitioners. This trend has been noticed among physical therapists (PTs) in the State of Kuwait. OBJECTIVE: The purpose of this study was to determine the prevalence and risk factors associated with WMSDs among PTs in Kuwait over a 12-month period. In addition, the result compared across countries and health care professions. METHODS: A descriptive cross-sectional design was used in this study. A self-administered questionnaire was distributed to the PT departments at Kuwait government hospitals and schools. A total of 312 returned questionnaires (69.3% response rate) were received. RESULTS: Results showed that 149 (48%) PT respondents experienced WMSDs. The lower back and muscle spasm were the most common area of the body injured and type of injury, respectively. Manual therapy techniques and patient transfers were most common activities associated with injuries. CONCLUSIONS: The prevalence of PTs with WMSDs in Kuwait was high and similar to other studies of PTs with WMSDs working in other countries. The performance of work activities was the leading risk factor for WMSDs, and WMSDs were prevalent among industrialized, industrially developing, and underdeveloped countries. Education of PTs regarding ergonomic and biomechanical principles as well as handson training of patient handling are the key tools to help prevent **WMSDs**

Cote P, Yu H, Shearer HM, Randhawa K, Wong JJ, Mior S, et al. Non-pharmacological management of persistent headaches associated with neck pain: a clinical practice guideline from the Ontario protocol for traffic injury management (OPTIMa) collaboration. European Journal of Pain. 2019; 23(6):1051-1070. https://doi.org/10.1002/ejp.1374

Abstract: OBJECTIVES: To develop an evidence-based guideline for the non-pharmacological management of persistent headaches associated with neck pain (i.e., tension-type or cervicogenic). METHODS: This guideline is based on systematic reviews of high-quality studies. A multidisciplinary expert panel considered the evidence of clinical benefits, cost-effectiveness, societal and ethical values, and patient experiences when formulating recommendations. Target audience includes clinicians; target population is adults with

persistent headaches associated with neck pain. RESULTS: When managing patients with headaches associated with neck pain, clinicians should (a) rule out major structural or other pathologies, or migraine as the cause of headaches; (b) classify headaches associated with neck pain as tension-type headache or cervicogenic headache once other sources of headache pathology has been ruled out; (c) provide care in partnership with the patient and involve the patient in care planning and decision making; (d) provide care in addition to structured patient education; (e) consider low-load endurance craniocervical and cervicoscapular exercises for tensiontype headaches (episodic or chronic) or cervicogenic headaches >3 months duration; (f) consider general exercise, multimodal care (spinal mobilization, craniocervical exercise and postural correction) or clinical massage for chronic tension-type headaches; (g) do not offer manipulation of the cervical spine as the sole form of treatment for episodic or chronic tension-type headaches; (h) consider manual therapy (manipulation with or without mobilization) to the cervical and thoracic spine for cervicogenic headaches >3 months duration. However, there is no added benefit in combining spinal manipulation, spinal mobilization and exercises; and (i) reassess the patient at every visit to assess outcomes and determine whether a referral is indicated. CONCLUSIONS: Our evidence-based guideline provides recommendations for the conservative management of persistent headaches associated with neck pain. The impact of the guideline in clinical practice requires validation. SIGNIFICANCE: Neck pain and headaches are very common comorbidities in the population. Tension-type and cervicogenic headaches can be treated effectively with specific exercises. Manual therapy can be considered as an adjunct therapy to exercise to treat patients with cervicogenic headaches. The management of tension-type and cervicogenic headaches should be patient-centred

Hale A and Booth R. The safety professional in the UK: development of a key player in occupational health and safety. Safety Science. 2019; 118:76-87. https://doi.org/10.1016/j.ssci.2019.04.015

Harris JI, Strom TQ, Erbes CR, and Ruzek J. Measuring perceived efficacy for coping with posttraumatic stress disorder

in the workplace. Work. 2019; 63(2):283-289. https://doi.org/10.3233/WOR-192929

Abstract: BACKGROUND: PTSD is associated with high levels of vocational difficulty, and research on relationships between PTSD and vocational adjustment may be relevant to vocational rehabilitation services to achieve optimal outcomes. Veteran perception of ability to cope with stressors in the workplace setting may play a role in rehabilitation outcome. OBJECTIVE: This article outlines preliminary steps in the development of the Vocational Efficacy in Trauma Survivors Scale (VETSS), to measure perceived efficacy in managing PTSD symptoms in the workplace. This has potential to expand future options for research in vocational rehabilitation for veterans with PTSD. METHODS: Veterans in outpatient treatment for PTSD at a large, mid-western Veterans Affairs Health Care System facility responded to items on the proposed instrument and items on other measures of vocational and psychological functioning to assess the potential validity of items for an instrument to measure vocational self-efficacy among veterans managing PTSD. RESULTS: In a sample of 63 working veterans who receive outpatient care for PTSD, exploratory factor analysis identified two viable subscales, one tapping Workplace Coping, and another tapping Self-Disclosure. CONCLUSIONS: Preliminary findings indicate that the measure demonstrated acceptable indications of reliability and validity. suggesting promise for future use in vocational rehabilitation research

Isoard-Gautheur S. Ginoux C. Gerber M. and Sarrazin P. The stress-burnout relationship: examining the moderating effect of physical activity and intrinsic motivation for off-job physical activity. Workplace Health & Safety. 2019; 67(7):350-360. https://doi.org/10.1177/2165079919829497

Abstract: Current research highlights the need to critically examine the factors that can reduce the relationship between work stress and burnout to improve employee health and well-being, as well as to create healthier workplaces. The objective of this study was to enhance insight into the association between stress and job burnout by testing the moderated moderating effect of off-job physical activity (PA) and intrinsic motivation for off-job PA on this association. A total of 369 university staff (70% females) completed a web survey comprising measures of perceived stress, job burnout, PA, and

intrinsic motivation for PA. A three-way conditional process model revealed that the "Stress x PA" interaction was significant for cognitive weariness, and that the three-way interaction between "Stress x PA x Intrinsic Motivation for PA" was significantly related to job burnout, and to cognitive weariness. The results highlight (a) that stress was associated with higher levels of job burnout; (b) that under a high stress condition, PA was negatively linked to cognitive weariness; and (c) that intrinsic motivation for PA reinforced the positive moderating effect of PA on the stress-burnout relationship, especially when stress is high

Johnson BT and Hennessy EA. Systematic reviews and metaanalyses in the health sciences: best practice methods for research syntheses. Social Science & Medicine. 2019; 233:237-251.

https://doi.org/10.1016/j.socscimed.2019.05.035

Abstract: RATIONALE: The journal Social Science & Medicine recently adopted the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009) as guidelines for authors to use when disseminating their systematic reviews (SRs). APPROACH: After providing a brief history of evidence synthesis, this article describes why reporting standards are important, summarizes the sequential steps involved in conducting SRs and meta-analyses, and outlines additional methodological issues that researchers should address when conducting and reporting results from their SRs. RESULTS AND CONCLUSIONS: Successful SRs result when teams of reviewers with appropriate expertise use the highest scientific rigor in all steps of the SR process. Thus, SRs that lack foresight are unlikely to prove successful. We advocate that SR teams consider potential moderators (M) when defining their research problem, along with Time, Outcomes, Population, Intervention, Context, and Study design (i.e., TOPICS + M). We also show that, because the PRISMA reporting standards only partially overlap dimensions of methodological quality, it is possible for SRs to satisfy PRISMA standards yet still have poor methodological quality. As well, we discuss limitations of such standards and instruments in the face of the assumptions of the SR process, including meta-analysis spanning the other SR steps, which are highly synergistic: Study search and

selection, coding of study characteristics and effects, analysis, interpretation, reporting, and finally, re-analysis and criticism. When a SR targets an important question with the best possible SR methods, its results can become a definitive statement that guides future research and policy decisions for years to come

Kosiba JD, Maisto SA, and Ditre JW. Patient-reported use of medical cannabis for pain, anxiety, and depression symptoms: systematic review and meta-analysis. Social Science & Medicine. 2019; 233:181-192.

https://doi.org/10.1016/j.socscimed.2019.06.005

Abstract: RATIONALE: Certifications for medical cannabis are generally restricted to a small number of specific medical conditions. yet patients frequently report symptoms of pain, anxiety, and depression as reasons for use. This is a critical concern for researchers, healthcare providers, and policymakers, yet research in this area is currently obstructed by the lack of a focused review or empirical synthesis on patient-reported reasons for medical cannabis use. OBJECTIVES: AND METHOD: The first aim of this project was to conduct the first systematic review and meta-analysis of empirical studies of patient-reported symptoms of pain, anxiety, and depression as reasons for medical cannabis use. The second aim was to conduct an empirical assessment of the methodological quality of extant research, test for publication bias, and test sex composition and quality scores of individual studies as possible sources of observed heterogeneity. RESULTS: Meta-analytic results indicated that pain (64%), anxiety (50%), and depression/mood (34%) were common reasons for medical cannabis use. No evidence for publication bias was detected, despite heterogeneity in prevalence rates. A comprehensive assessment of study quality identified a number of specific methodological limitations of the existing research, including challenges in patient recruitment, use of restrictive sampling frames, and a lack of randomized recruitment methods and validated assessment measures. CONCLUSION: Findings are discussed with regard to possible explanations for current results, clinical considerations, and areas of future research that are needed to move the field forward

Loh MY, Idris MA, Dormann C, and Muhamad H. Organisational climate and employee health outcomes: a systematic review. Safety Science. 2019; 118:442-452.

https://doi.org/10.1016/j.ssci.2019.05.052

Meunier S, Roberge C, Coulombe S, and Houle J. Feeling better at work! Mental health self-management strategies for workers with depressive and anxiety symptoms. Journal of Affective Disorders. 2019; 254:7-14.

https://doi.org/10.1016/j.jad.2019.05.011

Abstract: BACKGROUND: The aim of this study was to identify selfmanagement strategies that can be used in a workplace setting by workers living with depression and anxiety. METHODS: A two-round Delphi study was conducted among three panels of experts: (1) employees living with anxiety or depression (n=31); (2) managers of employees living with anxiety or depression (n=12); and (3) researchers with expertise in workplace mental health (n=15). Participants had to indicate whether each of 60 self-management strategies was applicable at work, and how useful each was for managing their symptoms while working. They could also reformulate or add strategies that were then evaluated in the second round. RESULTS: A total of 60 existing and new self-management strategies were retained following the two rounds. Most useful strategies refer to the ability to set boundaries, maintain work-life balance, identify sources of stress and create positive relationships with supervisor and colleagues. Panels differed in their assessment of the usefulness of strategies focusing on employees' empowerment. LIMITATIONS: Most participants were from Canada, limiting the generalizability of the results. CONCLUSION: The self-management strategies identified in this study should be included in programs focusing on mental health at work and disseminated to employees living with depression and anxiety. Managers should take employee's perspective into account when searching for solutions to help them. Future research should use an inductive approach to identify strategies that are specifically related to the workplace setting. Quantitative studies are also needed to evaluate the effect of such strategies on work functioning

Runjic E, Behmen D, Pieper D, Mathes T, Tricco AC, Moher D, et al. Following Cochrane review protocols to completion 10 years later: a retrospective cohort study and author survey. Journal of Clinical Epidemiology. 2019; 111:41-48.

https://doi.org/10.1016/j.jclinepi.2019.03.006

Abstract: OBJECTIVE: We analyzed patterns of publication of Cochrane review protocols (CRPs). STUDY DESIGN AND SETTING: We analyzed CRPs published in 2010, extracted their characteristics, and analyzed whether they were published by February 2018. We surveyed corresponding authors and Cochrane review groups to analyze reasons for nonpublication of protocols and analyzed factors predicting the time to publication. RESULTS: Of 576 CRPs, 446 (77.4%) were published as a full review and 130 (22.6%) were still unpublished in February 2018; among unpublished, 37 (28.5%) were withdrawn and 93 (71.5%) were still active. The most common authors' reason for abandoning a protocol was a lack of time to work on the review. The median time to publication was 2.78 years (range 0.96 to 8.05). Multivariate analysis showed that factors with the strongest association with shorter time to publication were review being an update and new authors added. Analysis only on methodological variables indicated that the strongest association for a shorter time until publication was found for including only published data. CONCLUSIONS: Almost a quarter of CRPs remains unpublished after 8 years. This figure is slightly higher than in a previous analysis 10 years ago. Strategies for enhancing completion of Cochrane reviews should be considered

Sarkar S, Raj R, Vinay S, Maiti J, and Pratihar DK. An optimization-based decision tree approach for predicting sliptrip-fall accidents at work. Safety Science. 2019; 118:57-69. https://doi.org/10.1016/j.ssci.2019.05.009

Strauser DR, Rumrill Jr PD, and Greco C. Applying the Illinois work and well-being model to increase labor force participation among people with multiple sclerosis. Journal of Vocational Rehabilitation. 2019; 51(1):11-20. https://doi.org/10.3233/JVR-191021

IWH authored publications.