IWH Research Alert December 1, 2017

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*Dobson KG, Ibrahim S, Gilbert-Ouimet M, Mustard CA, and Smith PM. Association between psychosocial work conditions and latent alcohol consumption trajectories among men and women over a 16-year period in a national Canadian sample. Journal of Epidemiology and Community Health. 2017; [Epub ahead of print].

http://dx.doi.org/10.1136/jech-2017-209691

Abstract: BACKGROUND: It is unclear how psychosocial working conditions influence future alcohol consumption. Using group-based trajectory modelling, this study aimed to determine: the number of latent alcohol consumption trajectories over 16 years in a representative sample of the Canadian workforce; the association between psychosocial working conditions and longitudinal alcohol consumption; and if the association between psychosocial work factors and longitudinal alcohol consumption differed among men and women. METHODS: We included 5458 employed adults from the longitudinal Canadian National Population Health Survey. Average daily alcohol consumption was measured every 2 years from 1994 to 2010. Psychosocial work factors were measured in 1994 using the Job Content Questionnaire. Group-based trajectory modelling was used to derive the appropriate number of alcohol behaviour trajectories. The association between psychosocial work factors and alcohol trajectory membership was estimated using multinomial logistic regression. Models were stratified by sex to determine if these associations differed among men and women. RESULTS: Three alcohol consumption trajectories were present: nondrinkers, light drinkers (0.5-1 drinks/day) and moderate drinkers (2-3 drinks/day). Higher workplace physical exertion and lower social support levels were associated with membership in the moderate drinking trajectory. Among men, lower psychological demands and higher physical exertion levels were



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associated with membership in the moderate drinking trajectory. Among women, lower levels of physical exertion were associated with membership in the light drinking trajectory, and higher psychological demand levels were associated with membership in the moderate drinking trajectory. CONCLUSIONS: Our study suggests that workplace physical exertion and psychological demands may be associated with different alcohol consumption trajectories among men and women

Ashley D and Graf NM. The process and experiences of self-employment among people with disabilities: a qualitative study. Rehabilitation Counseling Bulletin. 2017; 61(2):90-100. http://dx.doi.org/10.1177/0034355216687712

Barton CJ and Merolli MA. It is time to replace publish or perish with get visible or vanish: opportunities where digital and social media can reshape knowledge translation. British Journal of Sports Medicine. 2017; [Epub ahead of print].

http://dx.doi.org/10.1136/bjsports-2017-098367

Chambers LA, Jackson R, Worthington C, Wilson CL, Tharao W, Greenspan NR, Masching R, Pierre-Pierre V, Mbulaheni T, Amirault M, and Brownlee P. Decolonizing scoping review methodologies for literature with, for, and by indigenous peoples and the African diaspora: dialoguing with the tensions. Qualitative Health Research. 2017; [Epub ahead of print].

http://dx.doi.org/10.1177/1049732317743237

Abstract: This article summarizes our deepened understanding of decolonizing research with, for, and by Indigenous peoples and peoples of African descent that emerged from conducting a scoping review of the methodological literature and reflecting on our review process. Although our review identified decolonizing methodologies as a promising approach, we questioned if our scoping review process engaged in decolonizing knowing. To unpack the epistemological tensions between decolonizing knowing and Western ways of doing scoping reviews, we engaged in individual and collective reflective processes- dialoguing with the tensions-moving from individual immersion in the literature to transformative dialogues among the team. In reflecting upon our tensions with the scoping review process, themes that emerged included (a) ontological/epistemological disjunctures, (b) tensions with concepts and language, and (c) relationships with the literature and beyond. This reflexive process provides valuable insight into ways in which review methods might be made a decolonizing research experience

Dong S. Assessing workplace accommodation requests among older workers. Rehabilitation Counseling Bulletin. 2017; 61(2):101-111. http://dx.doi.org/10.1177/0034355216687286



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Ghahramani A. Diagnosis of poor safety culture as a major shortcoming in OHSAS 18001-certified companies. Industrial Health. 2017; 55(2):138-148. http://dx.doi.org/10.2486/indhealth.2015-0205 [open access]

Abstract: The evaluation of safety performance in occupational health and safety assessment series (OHSAS) 18001-certified companies provides useful information about the quality of the management system. A certified organization should employ an adequate level of safety management and a positive safety culture to achieve a satisfactory safety performance. The present study conducted in six manufacturing companies: three OHSAS 18001-certified, and three non-certified to assess occupational health and safety (OHS) as well as OHSAS 18001 practices. The certified companies had a better OHS practices compared with the non-certified companies. The certified companies slightly differed in OHS and OHSAS 18001 practices and one of the certified companies had the highest activity rates for both practices. The results indicated that the implemented management systems have not developed and been maintained appropriately in the certified companies. The in-depth analysis of the collected evidence revealed shortcomings in safety culture improvement in the certified companies. This study highlights the importance of safety culture to continuously improve the guality of OHSAS 18001 and to properly perform OHS/OHSAS 18001 practices in the certified companies

van der Graaf P, Forrest LF, Adams J, Shucksmith J, and White M. How do public health professionals view and engage with research? A gualitative interview study and stakeholder workshop engaging public health professionals and researchers. BMC Public Health. 2017; 17(1):892. http://dx.doi.org/10.1186/s12889-017-4896-1 [open access] Abstract: BACKGROUND: With increasing financial pressures on public health in England, the need for evidence of high relevance to policy is now stronger than ever. However, the ways in which public health professionals (PHPs) and researchers relate to one another are not necessarily conducive to effective knowledge translation. This study explores the perspectives of PHPs and researchers when interacting, with a view to identifying barriers to and opportunities for developing practice that is effectively informed by research. METHODS: This research focused on examples from two responsive research schemes, which provide university-based support for research-related enquiries from PHPs: the NIHR SPHR Public Health Practitioner Evaluation Scheme(1) and the responsive research service AskFuse(2). We examined enquiries that were submitted to both between 2013 and 2015, and purposively selected eight enguiries for further investigation by interviewing the PHPs and researchers involved in these requests. We also identified individuals who were eligible to make requests to the schemes but chose not to do so. In-depth interviews were conducted with six people in relation to the PHPES scheme, and 12 in relation to AskFuse. The interviews were transcribed and analysed using thematic framework analysis. Verification and extension of the findings were sought in a stakeholder workshop. RESULTS: PHPs recognised the importance of research



Research Excellence Advancing Employee Health findings for informing their practice. However, they identified three main barriers when trying to engage with researchers: 1) differences in timescales; 2) limited budgets; and 3) difficulties in identifying appropriate researchers. The two responsive schemes addressed some of these barriers, particularly finding the right researchers to work with and securing funding for local evaluations. The schemes also supported the development of new types of evidence. However, other barriers remained, such as differences in timescales and the resources needed to scale-up research. CONCLUSIONS: An increased mutual awareness of the structures and challenges under which PHPs and researchers work is required. Opportunities for frequent and meaningful engagement between PHPs and researchers can help to overcome additional barriers to co-production of evidence. Collaborative models, such as the use of researchers embedded in practice might facilitate this; however, flexible research funding schemes are needed to support these models

Grahn P, Palsdottir AM, Ottosson J, and Jonsdottir IH. Longer nature-based rehabilitation may contribute to a faster return to work in patients with reactions to severe stress and/or depression. International Journal of Environmental Research and Public Health. 2017; 14(11):E1310. http://dx.doi.org/10.3390/ijerph14111310 [open access]

Abstract: The global burden of depression and stress-related mental disorders is substantial, and constitutes a major need for effective rehabilitation. Can naturebased rehabilitation help people return to work? OBJECTIVE: To study if the length of a nature-based rehabilitation program affects the outcome with regard to return to work one year after the onset of the program, in a group of patients with long-term reactions to severe stress and/or depression. METHODS: A prospective, quasi-experimental study comparing results from 8-, 12-, and 24week periods of rehabilitation. The rehabilitation of 106 participants was carried out by a multimodal rehabilitation team in a specially designed rehabilitation garden. Return to work data were collected before the intervention and one year after the start of rehabilitation. In addition, data were collected regarding selfassessed occupational competence, personal control, and sense of coherence. As many as 68% of the participants returned to work or participated in job training or work-oriented measures, full- or part-time, after one year. Participants with a longer period of rehabilitation reported better results on occupational competence, and were more likely to participate in paid work, full-time or parttime, one year after rehabilitation. Study outcomes indicate that a longer rehabilitation period in a rehabilitation garden increases the possibility of a return to paid work

Kool B, Ameratunga S, Scott N, Lawrenson R, and Christey G. The epidemiology of work-related injury admissions to hospitals in the Midland region of New Zealand. Injury. 2017; 48(11):2478-2484. http://dx.doi.org/10.1016/j.injury.2017.09.018

Abstract: OBJECTIVE: To describe the epidemiological characteristics of patients



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with work-related injuries (WRI) admitted to hospitals in New Zealand's Midland Trauma System (MTS) during a four year period. METHODS: A retrospective review was conducted of trauma registry records for adults (>/=15years) admitted to four hospitals in the MTS as a result of WRI between 1 January 2012 and 31 December 2015. We describe the patterns of injury incidence by demographic characteristics, employment industry, mechanism of injury, body regions injured, injury severity score (ISS), month, day and time of injury, duration of hospital stay, domicile District Health Board (DHB), and discharge destination. RESULTS: The 2169 WRI trauma admissions, corresponded to an annualised rate of 205.8 per 100,000 workers or 234.3 per 100,000 full time employment employees (FTE). Injury rates were highest among males (238.0 per 100,000 workers) and those aged 15-24 years (227.1 per 100,000 workers), and lowest among Asians (83 per 100.000 workers). The highest injury rates occurred among the 'agriculture/forestry/fishing', 'manufacturing', and 'transport/postal/warehousing' industries. 'Contact with machinery' was the most common mechanism of injury, and the 'extremities or pelvic girdle' the most common body region injured. The in-hospital case fatality rate was <0.5%. CONCLUSION: The predominance of WRI in the 'agriculture/forestry/fishing' industries in the Midland region is consistent with national estimates. The high rate of injuries amongst males, young adults, and Maori requires further exploration

Lyon BK and Popov G. Communicating and managing risk: the key result of risk assessment. Professional Safety. 2017; 62(11):35-44. [doi unavailable as of Dec 1, 2017]

Mathes T, Klassen P, and Pieper D. Frequency of data extraction errors and methods to increase data extraction quality: a methodological review. BMC Medical Research Methodology. 2017; 17(1):152.

http://dx.doi.org/10.1186/s12874-017-0431-4 [open access]

Abstract: BACKGROUND: Our objective was to assess the frequency of data extraction errors and its potential impact on results in systematic reviews. Furthermore, we evaluated the effect of different extraction methods, reviewer characteristics and reviewer training on error rates and results. METHODS: We performed a systematic review of methodological literature in PubMed, Cochrane methodological registry, and by manual searches (12/2016). Studies were selected by two reviewers independently. Data were extracted in standardized tables by one reviewer and verified by a second. RESULTS: The analysis included six studies; four studies on extraction error frequency, one study comparing different reviewer extraction methods and two studies comparing different reviewer characteristics. We did not find a study on reviewer training. There was a high rate of extraction errors (up to 50%). Errors often had an influence on effect estimates. Different data extraction methods and reviewer characteristics had moderate effect on extraction error rates and effect estimates. CONCLUSION: The evidence base for established standards of data extraction seems weak despite the high prevalence of extraction errors. More comparative



studies are needed to get deeper insights into the influence of different extraction methods

McLaren CF, Reville RT, and Seabury SA. How effective are employer return to work programs? International Review of Law and Economics. 2017; 52:58-73.

http://dx.doi.org/10.1016/j.irle.2017.08.003

Morin KA, Eibl JK, Franklyn AM, and Marsh DC. The opioid crisis: past, present and future policy climate in Ontario, Canada. Substance Abuse Treatment, Prevention, and Policy. 2017; 12(1):45.

http://dx.doi.org/10.1186/s13011-017-0130-5 [open access] Abstract: BACKGROUND: Addressing opioid use disorder has become a priority in Ontario, Canada, because of its high economic, social and health burden. There continues to be stigma and criticism relating to opioid use disorder and treatment options. The result has been unsystematic, partial, reactive policies and programs developed based on divergent points of view. The aim of this manuscript is to describe how past and present understandings, narratives, ideologies and discourse of opioid use, have impacted policies over the course of the growing opioid crisis. COMMENTARY: Assessing the impact of policy is complex. It involves consideration of conceptual issues of what impacts policy change. In this manuscript we argue that the development of polices and initiatives regarding opioids, opioid use disorder and opioid agonist treatment in the last decade, have been more strongly associated with the evolution of ideas, narratives and discourses rather than research relating to opioids. We formulate our argument using a framework by Sumner, Crichton, Theobald, Zulu, and Parkhurs. We use examples from the Canadian context to outline our argument such as: the anti- drug legislation from the Canadian Federal Conservative government in 2007; the removal of OxyContin from the drug formulary in 2012; the rapid expansion of opioid agonist treatment beginning in the early 2000s, the unilateral decision made regarding fee cuts for physicians providing opioid agonist treatment in 2015; and the most recent implementation of a narcotics monitoring system, which are all closely linked with the shifts in public opinion and discourse at the time of which these policies and programs are implemented. CONCLUSION: We conclude with recommendations to consider a multifactorial response using evidence and stakeholder engagement to address the opioid crisis, rather than a reactive policy approach. We suggest that researchers have

an important role in shaping future policy by reframing ideas through knowledge translation, formation of values, creation of new knowledge and adding to the quality of public discourse and debate

Ndana J. Turning around a problem plant: 9 ways to change from severe violator to safety model. Professional Safety. 2017; 62(8):46-54. [doi unavailable as of Dec 1, 2017]



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Pickering CEZ, Nurenberg K, and Schiamberg L. Recognizing and responding to the "toxic" work environment: worker safety, patient safety, and abuse/neglect in nursing homes. Qualitative Health Research. 2017; 27(12):1870-1881.

http://dx.doi.org/10.1177/1049732317723889

Abstract: This grounded theory study examined how the certified nursing assistant (CNA) understands and responds to bullying in the workplace. Constant comparative analysis was used to analyze data from in-depth telephone interviews with CNAs (N = 22) who experienced bullying while employed in a nursing home. The result of the analysis is a multistep model describing CNA perceptions of how, over time, they recognized and responded to the "toxic" work environment. The strategies used in responding to the "toxic" environment affected their care provision and were attributed to the development of several resident and worker safety outcomes. The data suggest that the etiology of abuse and neglect in nursing homes may be better explained by institutional cultures rather than individual traits of CNAs. Findings highlight the relationship between worker and patient safety, and suggest worker safety outcomes may be an indicator of quality in nursing homes

Salloum RG, Shenkman EA, Louviere JJ, and Chambers DA. Application of discrete choice experiments to enhance stakeholder engagement as a strategy for advancing implementation: a systematic review. Implementation Science. 2017; 12(1):140.

http://dx.doi.org/10.1186/s13012-017-0675-8 [open access] Abstract: BACKGROUND: One of the key strategies to successful implementation of effective health-related interventions is targeting improvements in stakeholder engagement. The discrete choice experiment (DCE) is a stated preference technique for eliciting individual preferences over hypothetical alternative scenarios that is increasingly being used in health-related applications. DCEs are a dynamic approach to systematically measure health preferences which can be applied in enhancing stakeholder engagement. However, a knowledge gap exists in characterizing the extent to which DCEs are used in implementation science. METHODS: We conducted a systematic literature search (up to December 2016) of the English literature to identify and describe the use of DCEs in engaging stakeholders as an implementation strategy. We searched the following electronic databases: MEDLINE, Econlit, PsychINFO, and the CINAHL using mesh terms. Studies were categorized according to application type, stakeholder(s), healthcare setting, and implementation outcome. RESULTS: Seventy-five publications were selected for analysis in this systematic review. Studies were categorized by application type: (1) characterizing demand for the rapies and treatment technologies (n = 32), (2) comparing implementation strategies (n = 22), (3) incentivizing workforce participation (n = 11), and (4) prioritizing interventions (n = 10). Stakeholders included providers (n = 27), patients (n = 25), caregivers (n = 5), and administrators (n = 2). The remaining studies (n = 16) engaged multiple



stakeholders (i.e., combination of patients, caregivers, providers, and/or administrators). The following implementation outcomes were discussed: acceptability (n = 75), appropriateness (n = 34), adoption (n = 19), feasibility (n = 16), and fidelity (n = 3). CONCLUSIONS: The number of DCE studies engaging stakeholders as an implementation strategy has been increasing over the past decade. As DCEs are more widely used as a healthcare assessment tool, there is a wide range of applications for them in stakeholder engagement. The DCE approach could serve as a tool for engaging stakeholders in implementation science

Salomonsson S, Santoft F, Lindsater E, Ejeby K, Ljotsson B, Ost LG, Ingvar M, Lekander M, and Hedman-Lagerlof E. Cognitive-behavioural therapy and return-to-work intervention for patients on sick leave due to common mental disorders: a randomised controlled trial. Occupational and Environmental Medicine. 2017; 74(12):905-912.

http://dx.doi.org/10.1136/oemed-2017-104342

Abstract: OBJECTIVES: Common mental disorders (CMDs) cause great individual suffering and long-term sick leave. Cognitive-behavioural therapy (CBT) effectively treats CMDs, but sick leave is not reduced to the same extent as psychiatric symptoms. Research results regarding return-to-work interventions (RTW-Is) and their effect on sick leave are inconclusive. The aim of this study was to evaluate CBT, a RTW-I and combined CBT and RTW-I (COMBO) for primary care patients on sick leave due to CMDs. METHODS: Patients with CMDs (n=211) were randomised to CBT (n=64), RTW-I (n=67) or COMBO (n=80). Sick-leave registry data after 1 year and blinded Clinician's Severity Rating (CSR) of symptoms post-treatment and at follow-ups after 6 and 12 months were primary outcomes. RESULTS: There was no significant difference between treatments in days on sick leave 1 year after treatment start (mean difference in sick-leave days range=9-27). CBT led to larger reduction of symptoms post-treatment (CSR; Cohen's d=0.4 (95% CI 0.1 to 0.8)) than RTW-I, whereas COMBO did not differ from CBT or RTW-I. At follow-up, after 1 year, there was no difference between groups. All treatments were associated with large pre-treatment to post-treatment improvements, and results were maintained at 1-year follow-up. CONCLUSION: No treatment was superior to the other regarding reducing sick leave. All treatments effectively reduced symptoms, CBT in a faster pace than RTW-I, but at 1-year follow-up, all groups had similar symptom levels. Further research is needed regarding how CBT and RTW-I can be combined more efficiently to produce a larger effect on sick leave while maintaining effective symptom reduction

Whitley E and Popham F. Leaving the labour market later in life: how does it impact on mechanisms for health? Occupational and Environmental Medicine. 2017; 74(12):877-886.

http://dx.doi.org/10.1136/oemed-2016-104258 [open access] Abstract: OBJECTIVES: Negative associations between non-employment and



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health among older people are well established and are potentially important for successful ageing. However, opportunities to improve health through reemployment or extending working lives are limited as later-life exits from employment are often unwanted and permanent. We aim to establish a greater understanding of the psychosocial mechanisms underlying non-employment and health associations in older people to identify modifiable pathways through which the negative impact of non-employment can be ameliorated. METHODS: Using multilevel analysis of four waves of repeated panel data from a representative sample of 1551 older men and women reaching state retirement age in the West of Scotland from 1987/1988 to 2000/2004, we explored respondents' strength of agreement with 20 statements relating to their self-defined employment status, covering themes of functioning, social engagement, self-esteem, mental engagement, stress, and control and autonomy. RESULTS: Compared with those in employment, respondents who were retired, unemployed, sick/disabled and home makers were more likely to agree that this resulted in poor social engagement, low self-esteem and, with the possible exception of retirees, reduced mental engagement. Associations were particularly marked among unemployed and sick/disabled respondents who also agreed that their status was a source of worry and prevented them from feeling in control. CONCLUSION: Older people who are not in employment are at higher risk of poor physical and mental health. Interventions targeting psychosocial mechanisms such as social and mental engagement and self-esteem offer potentially valuable opportunities to improve health outcomes and promote successful ageing

*IWH authored publication.

