IWH Research Alert October 1, 2021

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# \*Cheng L, Jetha A, Cordeaux E, Lee K, and Gignac MAM. Workplace challenges, supports, and accommodations for people with inflammatory bowel disease: a scoping review. Disability and Rehabilitation. 2021; [epub ahead of print]. https://doi.org/10.1080/09638288.2021.1979662

Abstract: PURPOSE: To characterize the breadth of challenges that people with IBD experience in the workplace and identify supports and accommodations that can help sustain employment. MATERIALS AND METHODS: A scoping review was conducted using the Arksey and O'Malley framework. Electronic databases (MEDLINE, PsycINFO, CINAHL, EMBASE) and grey literature websites identified English-language studies published from inception through to June 2020. Studies where details were insufficient to extract the study purpose, sample, methods, and findings were deemed of poorer quality and excluded. RESULTS: Eighteen studies met selection criteria. Studies discussed common workplace challenges, including career planning, work performance, managing physical and cognitive symptoms, social impacts at work, and challenges related to the physical work environment and commuting. The range of workplace supports identified by studies was classified into five categories: flexibility, changes to the physical work



Research Excellence Safe Work Healthy Workers environment, social support, self-management strategies, and extended health benefits. CONCLUSIONS: IBD research typically has been descriptive and focused on broad characterizations of workplace challenges and supports. Future work needs to examine causal pathways and assess the efficacy of workplace supports, as well as conduct subgroup analyses and develop resources to facilitate communication and accommodation planning between workers living with IBD and their employers. Implications for Rehabilitation Rehabilitation professionals can play an important role in supporting people working with inflammatory bowel disease (IBD) by identifying accommodations and ways to make work environments more supportive. Providing rehabilitation support to people with IBD goes beyond symptom management and needs to consider the broader social, policy, and environmental challenges of employment

# \*Havaei F, Smith P, Oudyk J, and Potter GG. The impact of the COVID-19 pandemic on mental health of nurses in British Columbia, Canada using trends analysis across three time points. Annals of Epidemiology. 2021; 62:7-12.

https://doi.org/10.1016/j.annepidem.2021.05.004 [open access] Abstract: PURPOSE: This study examined trends over time in the prevalence of anxiety and depression among Canadian nurses: 6 months before, 1-month after, and 3 months after COVID-19 was declared a pandemic. METHODS: This study adopted a repeated cross-sectional design and surveyed unionized nurses in British Columbia (BC), Canada on three occasions: September 2019 (Time 1, prepandemic), April 2020 (Time 2, early-pandemic) and June 2020 (Time 3). RESULTS: A total of 10,117 responses were collected across three timepoints. This study found a significant increase of 10% to 15% in anxiety and depression between Time 1 and 2, and relative stability between Time 2 and 3, with Time 3 levels still higher than Time 1 levels. Cross-sector analyses showed similar patterns of findings for acute care and community nurses. Long-term care nurses showed a two-fold increase in the prevalence of anxiety early pandemic, followed by a sharper decline mid pandemic. CONCLUSIONS: COVID-19 has had short- and mid-term mental health implications for BC nurses particularly among those in the long-term care sector. Future research should evaluate the impact of COVID-19 on the mental health of health workers in different



Institute for Work & Safe Work Health Healthy Workers contexts, such as jurisdictional analyses, and better understand the long-term health and labor market consequences of elevated mental health symptoms over an extended time period

# \*Sale JEM, Gignac M, Frankel L, Thielke S, Bogoch E, Elliot-Gibson V, et al. Perspectives of patients with depression and chronic pain about bone health after a fragility fracture: a qualitative study. Health Expectations. 2021; [epub ahead of print].

# https://doi.org/10.1111/hex.13361

Abstract: Background: Compromised bone health is often associated with depression and chronic pain. Objective: To examine: (1) the experience of existing depression and chronic nonfracture pain in patients with a fragility fracture; and (2) the effects of the fracture on depression and pain. Design: A phenomenological study guided by Giorgi's analytical procedures. Setting and participants: Fracture patients who reported taking prescription medication for one or more comorbidities, excluding compromised bone health. Main variables studied: Patients were interviewed within 6 weeks of their fracture, and 1 year later. Interview questions addressed the recent fracture and patients' experience with bone health and their other health conditions, such as depression and chronic pain, including the medications taken for these conditions. Results: Twenty-six patients (5 men, 21 women) aged 45-84 years old with hip (n = 5) and nonhip (n = 21) fractures were recruited. Twenty-one participants reported depression and/or chronic nonfracture pain, of which seven reported having both depression and chronic pain. Two themes were consistent, based on our analysis: (1) depression and chronic pain overshadowed attention to bone health; and (2) the fracture exacerbated reported experiences of existing depression and chronic pain. Conclusion: Experiences with depression and pain take priority over bone health and may worsen as a result of the fracture. Health care providers treating fragility fractures might ask patients about depression and pain and take appropriate steps to address patients' more general emotional and physical state. Patient contribution: A patient representative was involved in the study conception, data interpretation and manuscript writing.



# Awada M, Lucas G, Becerik-Gerber B, and Roll S. Working from home during the COVID-19 pandemic: impact on office worker productivity and work experience. Work. 2021; 69(4):1171-1189. https://doi.org/10.3233/WOR-210301

Abstract: BACKGROUND: With the COVID-19 pandemic, organizations embraced Work From Home (WFH). An important component of transitioning to WFH is the effect on workers, particularly related to their productivity and work experience. OBJECTIVES: The objective of this study is to examine how worker. workspace, and work-related factors affected productivity and time spent at a workstation on a typical WFH day during the pandemic. METHODS: An online questionnaire was designed and administered to collect the necessary information. Data from 988 respondents were included in the analyses. RESULTS: Overall perception of productivity level among workers did not change relative to their inoffice productivity before the pandemic. Female, older, and highincome workers were likely to report increased productivity. Productivity was positively influenced by better mental and physical health statuses, having a teenager, increased communication with coworkers and having a dedicated room for work. Number of hours spent at a workstation increased by approximately 1.5 hours during a typical WFH day. Longer hours were reported by individuals who had school age children, owned an office desk or an adjustable chair, and had adjusted their work hours. CONCLUSION: The findings highlight key factors for employers and employees to consider for improving the WFH experience

Bougioukas KI, Vounzoulaki E, Mantsiou CD, Papanastasiou GD, Savvides ED, Ntzani EE, et al. Global mapping of overviews of systematic reviews in healthcare published between 2000 and 2020: a bibliometric analysis. Journal of Clinical Epidemiology. 2021: 137:58-72.

# https://doi.org/10.1016/j.jclinepi.2021.03.019

Abstract: OBJECTIVE: To conduct a bibliometric analysis using a large sample of overviews of systematic reviews (OoSRs) and reveal research trends and areas of interest about these studies. STUDY DESIGN AND SETTING: We searched MEDLINE, Scopus and Cochrane Database of Systematic Reviews from 1/1/2000 to 15/10/2020. We used Scopus meta-data and two authors recorded



supplementary information independently. We summarized the data using frequencies with percentages. RESULTS: A total of 1558 studies were considered eligible for analysis. We found that the publications have been increasing yearly and their nomenclature was not uniform (the most frequent label in the title was "overview of systematic reviews"). The largest number of papers and the most cited ones were published by corresponding authors from the UK. The publications were distributed across 737 scholarly journals and many of them were published in the field of complementary/alternative medicine, psychiatry/psychology, nutrition/dietetics, and pediatrics. The co-authorship analysis revealed collaborations among countries. The most common clinical conditions were depression, diabetes, cancer, dementia, pain, cardiovascular disease, stroke, obesity, and schizophrenia. CONCLUSION: OoSRs have recently become a popular approach of evidence synthesis. International collaborations between overview authors from countries with increased research productivity and countries with less research activity should be encouraged

# Curry AE, Pfeiffer MR, Metzger KB, Carey ME, and Cook LJ. **Development of the integrated New Jersey Safety and Health** Outcomes (NJ-SHO) data warehouse: catalysing advancements in injury prevention research. Injury Prevention. 2021; 27(5):472-478.

# https://doi.org/10.1136/injuryprev-2020-044101

Abstract: OBJECTIVE: Our objective was to describe the development of the New Jersey Safety and Health Outcomes (NJ-SHO) data warehouse-a unique and comprehensive data source that integrates state-wide administrative databases in NJ to enable the field of injury prevention to address critical, high-priority research questions. METHODS: We undertook an iterative process to link data from six state-wide administrative databases from NJ for the period of 2004 through 2018: (1) driver licensing histories, (2) traffic-related citations and suspensions, (3) police-reported crashes, (4) birth certificates, (5) death certificates and (6) hospital discharges (emergency department, inpatient and outpatient). We also linked to electronic health records of all NJ patients of the Children's Hospital of Philadelphia network, census tract-level indicators (using geocoded residential addresses) and state-wide Medicaid/Medicare



data. We used several metrics to evaluate the quality of the linkage process. RESULTS: After the linkage process was complete, the NJ-SHO data warehouse included linked records for 22.3 million distinct individuals. Our evaluation of this linkage suggests that the linkage was of high quality: (1) the median match probability-or likelihood of a match being true-among all accepted pairs was 0.9999 (IQR: 0.9999-1.0000); and (2) the false match rate-or proportion of accepted pairs that were false matches-was 0.0063. CONCLUSIONS: The resulting NJ-SHO warehouse is one of the most comprehensive and rich longitudinal sources of injury data to date. The warehouse has already been used to support numerous studies and is primed to support a host of rigorous studies in the field of injury prevention

#### Doan T, Ha V, Leach L, and La A. Mental health: who is more vulnerable to high work intensity? Evidence from Australian longitudinal data. International Archives of Occupational & Environmental Health. 2021; 94(7):1591-1604. https://doi.org/10.1007/s00420-021-01732-9

Abstract: AIM: The adverse impacts of exposure to work intensity on mental health have been widely studied. However, there is a lack of research examining who is most vulnerable in terms of position on the mental health distribution. The current study aims to: (a) initially estimate the average impacts of work intensity on workers' mental health in Australia, and then (b) estimate the extent to which this effect varies across the mental health distribution. MATERIALS AND METHODS: The current study uses data from waves 2005--2017 of the Household Income and Labour Dynamics in Australia (HILDA) survey. It first employs Average Treatment Effect (ATE) to provide a baseline/average treatment effect for the whole population, and then applies Quantile Regression fixed effects models for various quantiles on the mental health distribution. DISCUSSION AND CONCLUSION: The baseline estimates show that there are significantly negative effects of work intensity on mental health for the whole population, but importantly the quantile fixed effect estimates show that these adverse effects are substantially stronger for those with the poorest mental health (i.e. at the bottom of the distribution). When ATE alone is estimated, the significant effect is averaged over the mental health distribution, missing important information regarding the heterogeneity of the effect. The findings have important implications



for understanding and reducing mental health inequality, particularly inequality driven by workplace stress. First, they align with existing research demonstrating the importance of reducing psychosocial job stressors. Second, given workers with mental health problems were most susceptible to the adverse effects of work intensity, there is a need to offer additional support (and be sensitive of workloads) for this group in particular

Erlich M. Misclassification in construction: the original gig economy. ILR Review. 2021; 74(5):1202-1230. https://doi.org/10.1177/0019793920972321

# Grund C and Rubin M. The role of employees' age for the relation between job autonomy and sickness absence. Journal of Occupational & Environmental Medicine. 2021; 63(9):800-807. https://doi.org/10.1097/JOM.00000000002239

Abstract: Objective: We investigate whether job autonomy is associated with employees' sickness absence. In particular, we examine the role of employees' age for this relationship. Methods: We can make use of the representative German Study of Mental Health at Work data (n = 3099 employees) and control for relevant covariates. Results: Applying theoretical consideration such as the Job Demand Control Model, we do find evidence for an inverse relation between employees' job autonomy and days of sickness absence. This relation is only weakly mediated by job satisfaction and particularly relevant for more senior employees. Conclusions: Theoretical implications are aimed at extending the existing theoretical models by individuals age and derive age-specific propositions. Managerial implications include recommendations which directly affect the individuals work content with regard to the use of our definition of job autonomy.

Gwynn RC. Health inequity and the unfair impact of the COVID-19 pandemic on essential workers. American Journal of Public Health. 2021; 111(8):1459-1461. https://doi.org/10.2105/AJPH.2021.306386

Lambert SJ and Haley A. Implementing work scheduling regulation: compliance and enforcement challenges at the local

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# level. ILR Review. 2021; 74(5):1231-1257. https://doi.org/10.1177/00197939211031227

van Lennep JHPA, Trossel F, Perez RSGM, Otten RHJ, van Middendorp H, Evers AWM, et al. Placebo effects in low back pain: a systematic review and meta-analysis of the literature. European Journal of Pain. 2021; 25(9):1876-1897.

https://doi.org/10.1002/ejp.1811

Abstract: Background and objective: The current treatments of primary musculoskeletal low back pain (LBP) have a low to moderate efficacy, which might be improved by looking at the contribution of placebo effects. However, the size of true placebo effects in LBP is unknown. Therefore, a systematic review and meta-analysis were executed of randomized controlled trials investigating placebo effects in LBP. Databases and data treatment: The study protocol was registered in the international prospective register of systematic reviews Prospero (CRD42019148745). A literature search (in PubMed, Embase, The Cochrane Library, CINAHL and PsycINFO) up to 2021 February 16th yielded 2,423 studies. Two independent reviewers assessed eligibility and risk of bias. Results: Eighteen studies were eligible for the systematic review and 5 for the metaanalysis. Fourteen of the 18 studies were clinical treatment studies, and 4 were experimental studies specifically assessing placebo effects. The clinical treatment studies provided varying evidence for placebo effects in chronic LBP but insufficient evidence for acute and subacute LBP. Most experimental studies investigating chronic LBP revealed significant placebo effects. The meta-analysis of 5 treatment studies investigating chronic LBP depicted a significant moderate effect size of placebo for pain intensity (SMD = 0.57) and disability (SMD = 0.52). Conclusions: This review shows a significant contribution of placebo effects to chronic LBP symptom relief in clinical and experimental conditions. The meta-analysis revealed that placebo effects can influence chronic LBP intensity and disability. However, additional studies are required for more supporting evidence and evidence for placebo effects in acute or subacute LBP. Significance: This systematic review and meta-analysis provides evidence of true placebo effects in low back pain (LBP). It shows a significant contribution of placebo effects to chronic LBP symptom relief. The results highlight the importance of patient- and context-

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related factors in fostering treatment effects in this patient group. New studies could provide insight into the potential value of actively making use of placebo effects in clinical practice.

#### Lork K, Holmgren K, and Danielsson L. A short work-directed rehabilitation to promote work capacity while depressed and anxious: a qualitative study of workers' experiences. Disability and Rehabilitation. 2021; 43(17):2487-2496. https://doi.org/10.1080/09638288.2019.1704893

Abstract: PURPOSE: Most people with common mental disorders are working despite symptoms. This study explores individuals' experiences of a work-directed rehabilitation, provided by occupational therapists and physiotherapists, aiming to promote work capacity in persons with common mental disorders. METHODS: A qualitative content analysis was used, and 11 women and 8 men with depression or anxiety disorder were interviewed. They were 25-66 years old, had different occupations and were working full or parttime. RESULTS: The participants experienced a process interpreted as Increasing belief in one's capacity through supported reflection and practice. This theme reflects the shifting between "reflecting" and "doing" through rehabilitation and the growing hope for change. The increasing belief in one's capacity was developed through three stages, comprised of the categories To be supported by a professional, To realise things about oneself and To try new strategies for change. CONCLUSIONS: Strategies suggested by occupational therapists and physiotherapists have the potential to promote work capacity in people who are working while depressed and anxious. The results may deepen the understanding among rehabilitation professionals about the importance of a person-centred approach to people with common mental disorders, and to combine reflection and practical exercises to support the development of workrelated strategies. Implications for rehabilitation Work-directed rehabilitation provided by occupational therapists and/or physiotherapists is beneficial to people with common mental disorders. Rehabilitation professionals should focus on facilitating self-efficacy among people with common mental disorders. An individualised person-centred approach seems important in order to initiate change



Nankongnab N, Kongtip P, Tipayamongkholgul M, Silpasuwan P, Kaewboonchoo O, Luksamijarulkul P, et al. Occupational hazards, health conditions and personal protective equipment used among healthcare workers in hospitals, Thailand. Human and Ecological Risk Assessment. 2021; 27(3):804-824. https://doi.org/10.1080/10807039.2020.1768824 [open access] Abstract: This cross-sectional study aimed to evaluate occupational hazards, health conditions and personal protective equipment used among healthcare workers. Information from the sample size of 1,128 healthcare workers were collected using questionnaires. The healthcare workers participated in this study were from five departments including inpatient, outpatient, surgery and anesthesia, nutrition service and hospital support services departments in five hospitals in Thailand. The results indicated that the majority of healthcare workers were female; these healthcare workers work 9.0 to 11.1 hours/day on average and were exposed to several chemical, biological and physical hazards. The healthcare workers in the nutrition service department reported the highest percentage of musculoskeletal disorder and respiratory problems. The highest percentage of skin problems were reported by healthcare workers in surgery and anesthesia department. The results showed musculoskeletal disorder, respiratory and skin problem significantly differed among healthcare workers in the five departments including the wrists/hands (p = 0.024), upper back (p = 0.009), chest pain symptoms (p = 0.004), and dry/wound symptoms (p = 0.013). Healthcare workers did not have adequate protection from workrelated hazards in their workplace. Health education programs, control measures and organizational policies should be implemented to mitigate the hazards for healthcare workers in hospitals

Newman PA, Guta A, and Black T. Ethical considerations for qualitative research methods during the COVID-19 pandemic and other emergency situations: navigating the virtual field. International Journal of Qualitative Methods. 2021; 20:1-12. https://doi.org/10.1177/16094069211047823

Orellana C, Kreshpaj B, Burstrom B, Davis L, Frumento P, Hemmingsson T, et al. Organisational factors and underreporting of occupational injuries in Sweden: a population-

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#### based study using capture-recapture methodology. Occupational and Environmental Medicine. 2021; 78(10):745-752. https://doi.org/10.1136/oemed-2020-107257

Abstract: OBJECTIVE: To estimate the magnitude of under-reporting of non-fatal occupational injuries (OIs) by different organisational factors in Sweden for the year 2013. METHODS: Capture-recapture methods were applied using two data sources: (1) the national OI register and (2) records from a labour market insurance company. To assure comparability of data sources, the analysis was restricted to the public sector and private companies with at least 50 employees. Ols were matched using personal identification number and reported injury dates (±7 days). Organisational factors were obtained from the national labour market register and injury severity (no healthcare/only outpatient/hospitalised) from the National Patient Register. Total number of OIs and ascertainment by data sources were estimated assuming data source independence. RESULTS: There were an estimated 98 493 OIs in 2013. Completeness of reporting OIs to the national register and to the insurance company was estimated at 73% and 43%, respectively. No report to either source was estimated at 15 000 OIs (~15%). Under-reporting to the national register differed by selected organisational factors, being higher among organisations in the public sector, those with more females, with a younger workforce and with a higher proportion of immigrants. Overall under-reporting was more common in agriculture (19.7%), other services (19.3%), commerce and hospitality (19.1%), health (18.4%) and education (18.4%). Under-reporting decreased as injury severity increased, with little variations across sectors of economic activity. CONCLUSIONS: Results suggest considerable under-reporting of OIs in Sweden and differential under-reporting by organisational factors. Results are relevant for official estimates of burden and for setting priorities for workplace safety and prevention

# Tsang A and Maden M. CLUSTER searching approach to inform evidence syntheses: a methodological review. Research Synthesis Methods. 2021; 12(5):576-589.

# https://doi.org/10.1002/jrsm.1502

Abstract: BACKGROUND: The CLUSTER model of searching was proposed as a systematic method of searching for studies for reviews of complex interventions. AIM: The method has not been evaluated

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before. This methodological review identified and evaluated a sample of evidence syntheses that have used CLUSTER. METHODS: A forward citation search on the seed CLUSTER publication was conducted on Web of Science Core Collection using six journal citation indexes and Google Scholar in December 2020. Reviews which used the CLUSTER method were eligible for inclusion. A narrative synthesis was used to describe the types of evidence syntheses that used CLUSTER searching, the extent to which the CLUSTER approach has been operationalised within evidence syntheses and whether the value, benefits and limitations of CLUSTER were assessed by the reviewers. FINDINGS: A total of 16 reviews were identified and eligible for synthesis. Six different review types that used CLUSTER were identified with realist reviews being the most prominent. The evaluation of complex interventions was the most common review topic area. The use of CLUSTER varied among reviews with the retrieval of sibling studies being the most common reason. 'Citations' and 'Lead authors' were the most followed elements of CLUSTER. CONCLUSIONS: Evidence suggests that CLUSTER has been adopted for use in reviews of complex interventions. Its usage varied among the included reviews. It is imperative that future reviewers diligently report the elements and steps of CLUSTER that were utilised in order to provide a reproducible and transparent search strategy that can be reported with similar transparency to bibliographic database searches

\*IWH authored publications.

