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***Carnide N, Feng G, Song C, Demers PA, Macleod JS, and Sritharan J. Occupational patterns of opioid-related harms comparing a cohort of formerly injured workers to the general population in Ontario, Canada. *Canadian Journal of Public Health*. 2024; [epub ahead of print].**

<https://doi.org/10.17269/s41997-024-00882-w> [open access]

Abstract: The role of work-related injuries as a risk factor for opioid-related harms has been hypothesized, but little data exist to support this relationship. The objective was to compare the incidence of opioid-related harms among a cohort of formerly injured workers to the general population in Ontario, Canada.

***Ponzano M, Buren R, Adams NT, Jun J, Jetha A, Mack DE, et al. Effect of exercise on mental health and health-related quality of life in adults with spinal cord injury: a systematic review and meta-analysis. *Archives of Physical Medicine & Rehabilitation*. 2024; [epub ahead of print].**

<https://doi.org/10.1016/j.apmr.2024.02.737> [open access]

Abstract: Objectives To determine the effect of exercise interventions on mental health and health-related quality of life (HRQoL) in individuals with SCI. Data sources We searched Embase, CINAHL, Medline, PsychINFO and SPORTDiscus from inception to September 2023. Study selection We included randomized controlled trials that: 1) involved participants >18 years old with a SCI; 2) administered an exercise intervention; 3) measured subjective well-being, psychological well-being, social well-being, and/or HRQoL as outcomes. We reported standardized means differences (d) with a 95% confidence interval (CI), assessed the risk of bias by using the Revised Cochrane Risk-of-bias Tool for Randomized Trials (RoB 2), and the certainty of the evidence using GRADE. Data synthesis Nineteen studies (797 participants, mean age < 65 years in every study) were included. Exercise improved overall well-being (d = 0.494; 95% CI 0.268, 0.720; low certainty evidence), subjective well-

being ($d = 0.543$; 95% CI 0.270, 0.816; low certainty evidence), psychological well-being ($d = 0.499$; 95% CI 0.193, 0.805; low certainty evidence), social well-being ($d = 0.452$; 95% CI 0.151, 0.752; low certainty evidence), and HRQoL ($d = 0.323$; 95% CI 0.072, 0.574; low certainty evidence). Four serious adverse events probably attributable to the interventions were reported in three studies. Conclusions Exercise interventions can improve well-being and HRQoL in adults with SCI <65 years of age. Additional research is needed to determine effectiveness in adults ≥ 65 years of age.

Barbieri DF, Brusaca LA, Mathiassen SE, Oliveira AB, and Srinivasan D. Do sit-stand tables affect physical behavior and body composition similarly in normal-weight and overweight office workers? A pilot study. IJSE Transactions on Occupational Ergonomics and Human Factors. 2023; 11(3-4):81-93.

<https://doi.org/10.1080/24725838.2023.2281964>

Abstract: OCCUPATIONAL APPLICATIONS Sedentary behavior is a significant health concern among office workers. We completed the same 6-month sit-stand table intervention at work for groups of normal-weight and overweight workers, and compared it to not having sit-stand tables. The intervention caused the intended decrease in sitting time in both groups and a corresponding increase in standing. We did not find compensation effects on physical behavior outside of work. Furthermore, the intervention did not change the composition of fat, lean, and bone mass in either group. Thus, strategies including initiatives to increase physical activity are likely needed to have effects on body composition; and an intervention needs to be sustained for longer than six months for any changes in body composition to be observed

Cronbach N, Foot B, and Scawn R. Severe ocular chemical injury in the UK: a British Ophthalmological Surveillance Unit study. Eye. 2024; [epub ahead of print].

<https://doi.org/10.1038/s41433-024-03073-6>

Abstract: BACKGROUND: Severe ocular chemical injury is a potentially devastating condition which most commonly affects men of working age. Workplace injuries previously accounted for the majority of incidents, but there has been a recent increase in assaults involving corrosive substances throughout the UK. The objectives of this study were to determine the incidence and demographics of severe ocular chemical injury and describe current surgical management practices. METHODS: Cases were prospectively ascertained through the British Ophthalmological Surveillance Unit monthly reporting system during 2019-21. In total, 20 cases involving 29 eyes met the inclusion criteria. RESULTS: The reported incidence of severe ocular chemical injury during the pre-pandemic period of the study was 0.24 per million. Cases due to alleged assault have become more common than workplace injuries. A total of 81% patients had persistent complications at 6 months requiring ongoing treatment, and 60% patients required surgical intervention. CONCLUSION: Although there are limitations with the case ascertainment methods, severe ocular chemical injury remains rare within the UK. There has been a proportionate increase in cases related to alleged assault compared with previous similar studies. Amniotic membrane grafting remains the most commonly performed surgical procedure in these patients

Di Donato M, Sheehan LR, Iles R, Gray S, Buchbinder R, and Collie A. Patterns of physiotherapy attendance in compensated Australian workers with low back pain: a retrospective cohort study. Pain. 2024; [epub ahead of print].

<https://doi.org/10.1097/j.pain.0000000000003228>

Abstract: Workers with low back pain (LBP) frequently seek care from physiotherapists. We sought to identify patterns of physiotherapy attendance and factors associated with these patterns in Australian workers with accepted compensation claims for LBP. We included workers with accepted workers' compensation claims for LBP from 4 Australian states between 2011 and 2015. We used trajectory modelling to identify distinct groups of workers based on the number (ie, volume) of monthly physiotherapy attendances over a 2-year period from claim acceptance. Descriptive statistics and logistic regression models were used to compare the characteristics of the groups. A small but significant proportion attend numerous times over a long period. 79.0% of the sample (N = 22,767) attended physiotherapy at least once in the 2 years after claim acceptance. Among these, trajectory modelling identified 4 distinct patterns of attendance. Most (N = 11,808, 51.9%) recorded a short-term low-volume pattern, 26.8% (n = 6089) recorded a short-term high-volume pattern, 14.3% (n = 3255) recorded a long-term low-volume pattern, and 7.1% (n = 1615) recorded a long-term high-volume pattern. Workers from Victoria (OR 0.34, 99% CI 0.31, 0.37), South Australia (OR 0.69, 99% CI 0.60, 0.80), and Western Australia (OR 0.79, 99% CI 0.69, 0.88) were significantly less likely to attend physiotherapy than workers from Queensland. Victorian workers were significantly more likely to be in one of the 2 long-term trajectory groups (OR 8.17, 99% CI 6.86, 9.73; OR 18.68, 99% CI 13.57, 25.70). In conclusion, most compensated Australian workers with LBP attend physiotherapy. Significant interjurisdictional differences between attendance patterns suggests that policy may play an important role in healthcare delivery

Fuentes K, Hsu S, Patel S, and Lindsay S. More than just double discrimination: a scoping review of the experiences and impact of ableism and racism in employment. Disability and Rehabilitation. 2024; 46(4):650-671.

<https://doi.org/10.1080/09638288.2023.2173315>

Abstract: PURPOSE: Research has shed light on the employment barriers faced by individuals with disabilities, and by racialized people. The challenges faced by people belonging to both marginalized groups are less well-understood. The purpose of this scoping review was to examine existing research on labour market and workplace experiences of racialized people with disabilities, and to identify how ableism and racism intersect to shape employment experiences and outcomes. METHODS: Seven international databases were searched, covering the period from 2000 to April 2022. Four reviewers independently conducted the screening, and data extraction and analysis were performed on 44 articles that met our inclusion criteria. RESULTS: The findings highlighted rates of workplace ableism and racism (including discrimination allegations and perceived discrimination); types and forms of experiences arising from the intersection of ableism and racism (including unique individual stereotyping and systemic and institutional discrimination); and the role of other demographic variables. The intersection of ableism and racism impacted labour market outcomes, well-being in the workplace, and career/professional advancement. CONCLUSIONS: Our review highlights the need for greater in-depth research focusing explicitly on the intersection of ableism and racism (and of other forms of discrimination), to better understand and address the barriers that racialized people with disabilities face in employment. IMPLICATIONS FOR REHABILITATION The experiences of racialized

people with disabilities have been under explored, and clinicians and rehabilitation specialists should consider incorporating intersectionality into their practices to better understand and serve these populations. Ableism and racism do not operate in isolation, and clinicians and other professionals need to be aware that racialized people with disabilities may face unique challenges and barriers as a result. Service providers should aim to address gaps and inequities in services faced by racialized people with disabilities which may prevent them from finding and/or maintaining meaningful employment

Galarneau JM, Labreche F, Durand-Moreau Q, Ruzycski S, Adisesh A, Burstyn I, et al. Excess risk of COVID-19 infection and mental distress in healthcare workers during successive pandemic waves: analysis of matched cohorts of healthcare workers and community referents in Alberta, Canada. Canadian Journal of Public Health. 2024; 115(2):220-229.

<https://doi.org/10.17269/s41997-023-00848-4> [open access]

Abstract: Objectives: To investigate changes in risk of infection and mental distress in healthcare workers (HCWs) relative to the community as the COVID-19 pandemic progressed. Methods: HCWs in Alberta, Canada, recruited to an interprovincial cohort, were asked consent to link to Alberta's administrative health database (AHDB) and to information on COVID-19 immunization and polymerase chain reaction (PCR) testing. Those consenting were matched to records of up to five community referents (CRs). Physician diagnoses of COVID-19 were identified in the AHDB from the start of the pandemic to 31 March 2022. Physician consultations for mental health (MH) conditions (anxiety, stress/adjustment reaction, depressive) were identified from 1 April 2017 to 31 March 2022. Risks for HCW relative to CR were estimated by fitting wave-specific hazard ratios. Results: Eighty percent (3050/3812) of HCWs consented to be linked to the AHDB; 97% (2959/3050) were matched to 14,546 CRs. HCWs were at greater risk of COVID-19 overall, with first infection defined from either PCR tests (OR=1.96, 95%CI 1.76-2.17) or physician records (OR=1.33, 95%CI 1.21-1.45). They were also at increased risk for each of the three MH diagnoses. In analyses adjusted for confounding, risk of COVID-19 infection was higher than for CRs early in the pandemic and during the fifth (Omicron) wave. The excess risk of stress/adjustment reactions (OR=1.52, 95%CI 1.35-1.71) and depressive conditions (OR=1.39, 95%CI 1.24-1.55) increased with successive waves during the epidemic, peaking in the fourth wave. Conclusion: HCWs were at increased risk of both COVID-19 and mental ill-health with the excess risk continuing late in the pandemic.

Hijdra RW, Robroek SJW, Sadigh Y, Burdorf A, and Schuring M. The effects of an interdisciplinary employment program on paid employment and mental health among persons with severe mental disorders. International Archives of Occupational & Environmental Health. 2024; 97(3):253-262.

<https://doi.org/10.1007/s00420-023-02039-7> [open access]

Abstract: Purpose: This study evaluates the effects of the interdisciplinary employment program 'Work As Best Care (WABC)' on employment participation and mental health of persons with severe mental disorders. Methods: WABC is a 'work first' employment program for unemployed persons with severe mental disorders in which employment professionals work closely together with mental health professionals. In a longitudinal non-randomized controlled study, participants of WABC (n = 35) are compared with participants of the control group (n = 37), who received regular employment support. Participants were followed for 1 year and filled out questionnaires on individual characteristics and health at baseline, after 6 and 12 months. This information was enriched with monthly register data

on employment status from 2015 until 2020. Difference-in-differences analyses were performed to investigate changes in employment participation among participants of WABC and the control group. A generalized linear mixed-effects model was used to compare changes in mental health (measured on 0-100 scale) between the two groups. Results: Before WABC, employment participation was 22.0%points lower among participants of WABC compared to the control group. After starting WABC, employment participation increased with 15.3%points per year among participants of WABC, compared to 5.6%points in the control group. Among all participants of WABC, no change in mental health was found (β 1.0, 95% CI - 3.4; 5.5). Only female participants of WABC showed a significant change in mental health (β 8.0, 95% CI 2.6; 13.4). Conclusion: To enhance employment participation of persons with severe mental disorders, an interdisciplinary 'work-first' approach in which professionals of employment services and mental health services work in close collaboration, is of paramount importance.

Ko Y, Howard SC, Golden AP, and French B. Adjustment for duration of employment in occupational epidemiology. *Annals of Epidemiology*. 2024; 94:33-41.

<https://doi.org/10.1016/j.annepidem.2024.04.006> [open access]

Abstract: PURPOSE: In occupational epidemiology, the healthy worker survivor effect can manifest as a time-dependent confounder because healthier workers can accrue greater amounts of exposure over longer periods of employment. For example, in occupational studies of radiation exposure that focus on cumulative annualized radiation dose, workers can accrue greater amounts of cumulative radiation exposure over longer periods of employment, while workers with longer periods of employment can transition into jobs with a reduced potential for annualized radiation exposure. The extent to which confounding arising from the healthy worker survivor effect impacts radiation risk estimates is unknown. METHODS: We assessed the impact of the healthy worker survivor effect on estimates of radiation risk among nuclear workers in a Million Person Study cohort. In simulation studies, we contrasted the ability of marginal structural Cox models with inverse probability weighting and Cox proportional hazards models to account for time-dependent confounding arising from the healthy worker survivor effect. RESULTS: Marginal structural Cox models and Cox proportional hazards models with flexible functional forms for duration of employment provided reliable results. CONCLUSIONS: It is crucial to flexibly adjust for duration of employment to account for confounding arising from the healthy worker survivor effect in occupational epidemiology

Laraqui O, Roland-Levy C, Ghailan T, El BH, Manar N, Deschamps F, et al. Musculoskeletal disorders of fishermen in the artisanal and coastal sector. *International Maritime Health*. 2024; 75(1):1-9.

<https://doi.org/10.5603/imh.98470> [open access]

Abstract: Background: The aim of this study was to screen for musculoskeletal disorders (MSD) complaints, to analyse the activity and to identify their risk factors. Materials and methods: This cross-sectional epidemiological study involved 903 men aged > 20 years and with a seniority > 2 years. It included a questionnaire and an ergonomic analysis of the activity. The questionnaire included: socio-demographic and occupational characteristics, health status and life habits, stress and items from the Nordic questionnaire. The observation of work situations required video recordings and the use of three methods: Occupational Safety and Health Administration (OSHA), Rapid Upper Limb Assessment (RULA) and the Gesture Tracking and Assessment Tool (Outil de Repérage et d'Évaluation des Gestes: OREGÉ). Results: The prevalence of MSDs was 61.9%. It was significantly higher among deckhands

than among other professionals (65.6% vs 27.4%; $p < 0.001$) and in seasonal workers than in permanent workers (67.8% vs 43.1%; $p < 0.001$). A positive correlation was noted between MSDs and daily work duration. Stress was an aggravating factor, whereas leisure activities were protective. The prevalence of MSDs was 40.5% (lower back), 40.4% (wrist/hand joints), 34.6% (neck) and 31.7% (shoulders). The ergonomic analysis of the workstation was performed on a deckhand who unloaded the fish crates out of the hold of a trawler. OSHA score = 12 (normal < 5); significant risk of upper limb MSD. RULA total score = 7 (acceptable between 1 and 2); immediate modification. OREGES scores evaluating effort, repetitiveness and joint positions indicate that the actions were not recommended or to be avoided. Conclusions: The analysis made it possible to evaluate the difficulty of the job and to note a high risk of MSDs requiring ergonomic and organizational improvements.

Macpherson RA, Tamburic L, Neis B, and McLeod CB. Work disability duration among mobile workers: does intraprovincial mobility matter as much as interprovincial mobility? *Journal of Occupational & Environmental Medicine*. 2024; 66(4):329-338.

<https://doi.org/10.1097/JOM.0000000000003050>

Abstract: OBJECTIVE: The aim of the study is to compare work disability duration of intraprovincially and interprovincially mobile workers with nonmobile workers in British Columbia, Canada. METHODS: Workers' compensation claims were extracted for workers injured between 2010 and 2019. Employer and residential postal codes were converted to economic regions to define nonmobile, intraprovincially, and interprovincially mobile workers. Quantile regression models using matched cohorts were used to estimate differences in work disability days at different percentiles of the distribution. RESULTS: Compared with nonmobile workers, both mobile worker groups had longer work disability durations, particularly interprovincially mobile workers. Differences persisted in injury-stratified models and were partially or fully attenuated in some industry-stratified models. CONCLUSIONS: Workers' compensation systems, employers, and healthcare providers may need to tailor specific interventions for mobile workers who are from out-of-province as well as traveling between regions in the province

Munsell EGS, Kudla A, Su H, Wong J, Crown D, Capraro P, et al. Employers' perceptions of challenges and strategies in hiring, retaining, and promoting employees with physical disabilities. *Rehabilitation Counseling Bulletin*. 2024; 67(3):177-189.

<https://doi.org/10.1177/00343552221130304>

Olle-Espluga L, Paya Castiblanque R, Llorens-Serrano C, Esteve-Matali L, and Navarro-Gine A. Protective action in the workplace in the time of COVID-19: the role of worker representation. *American Journal of Industrial Medicine*. 2024; 67(5):453-465.

<https://doi.org/10.1002/ajim.23578>

Abstract: BACKGROUND: This study addresses the contribution of worker representation to health and safety in the pandemic context. To do so, we examine whether the self-reported presence of representatives in workplaces is associated with the implementation of anti-COVID-19 protective action and with which type of measures their existence is most strongly associated (individual, collective or organizational). The article also explores how the presence of worker representatives and anti-COVID-19 protective measures are distributed according to workers' socio-professional characteristics and company features. METHODS: This is a cross-sectional study based on an online survey conducted in Spain ($n = 19,452$ workers). Multiple Correspondence Analysis was used for the

multivariate description while the association between worker representation and protective measures was assessed by robust Poisson regressions. RESULTS: The maps resulting from the Multiple Correspondence Analysis allow for the identification of patterns of inequalities in protection, with a clear occupational social class divide. The regression models show that protective measures are applied more frequently where worker representatives exist, this association being particularly strong in relation to organizational measures. CONCLUSIONS: The presence of worker representation is systematically associated with a greater presence of protective measures, which could have implications for the reduction of social inequalities resulting from labor-management practices

Perkison WB, Schaefer CM, Green-McKenzie J, Roy RW, Shofer FS, and McCarthy RB. Outcomes for a heat illness prevention program in outdoor workers: a 9-year overview. *Journal of Occupational & Environmental Medicine*. 2024; 66(4):293-297.

<https://doi.org/10.1097/JOM.0000000000003051>

Abstract: OBJECTIVE: To describe the outcomes effect of removing the medical surveillance component from a heat illness prevention program (HIPP) for outdoor workers from a Central Texas municipality. METHODS: Heat-related illness (HRI) frequency and workers' compensation (WC) cost were assessed retrospectively in a cohort of 329 workers from 2011-2019. During 2011-2017, the HIPP included training, acclimatization, and medical surveillance. In 2018-2019, a modified (mHIPP) was implemented that included training and acclimatization, but without medical surveillance. RESULTS: The HRI rate during HIPP averaged 19.5 per 1000 workers during the first 4 years, dropped to 1.01 per 1,000 workers over the next 3 years, (2015-2017), and increased during mHIPP, to 7.6 per 1,000 workers. DISCUSSION: Although the case increase during the mHIPP was small, medical surveillance may be an important component in lowering workforce HRI

Salonsalmi A, Kouvonen A, Rahkonen O, Lahelma E, and Lallukka T. Work-family conflicts and sickness absence: a register-linked cohort study among young and early midlife employees. *European Journal of Public Health*. 2024; 34(2):316-321.

<https://doi.org/10.1093/eurpub/ckae012> [open access]

Abstract: Background: Work-family conflicts (WFC) have been associated with poor mental health, poor self-rated health and sickness absence. However, studies on short sickness absence are lacking and more information is needed also about long sickness absence regarding the direction of WFC, and potential explaining factors particularly among young and early middle-aged employees. Methods: The Helsinki Health Study baseline survey (2017) among 19- to 39-year-old municipal employees (N = 3683, 80% women, response rate 51.5%) was linked to employer's sickness absence data. The associations of work-to-family conflicts (WTFC) and family-to-work conflicts (FTWC) with short (1-7 days) and long (over 7 days) sickness absence were analyzed using negative binomial regression analysis. Covariates were age, gender, family-related factors and work-related factors. Stratified analyses by occupational class were performed. The results are presented as rate ratios and their 95% confidence intervals. Results: High WTFC were associated with short (1.25, 1.12-1.40) and long (1.37, 1.11-1.70) sickness absence. High FTWC were also associated with short (1.12, 1.03-1.22) and long (1.24, 1.06-1.45) sickness absence. Adjustment for family-related factors strengthened the associations, whereas adjustment for work-related factors abolished the associations between WTFC and sickness absence. Associations between WFC and sickness absence were observed among two lowest occupational classes only. Conclusion: WFC are associated with both short and long sickness

absence. Work-related factors including the quality of supervisory work and shift work play a role in the association. Intervention studies could determine if improvements in combining work and family life lead to a reduction in sickness absence.

Ulfert AS, LeBlanc P, Gonzalez-Roma V, Grote G, and Langer M. Are we ahead of the trend or just following? The role of work and organizational psychology in shaping emerging technologies at work. *European Journal of Work and Organizational Psychology*. 2024; 33(2):120-129.

<https://doi.org/10.1080/1359432X.2024.2324934> [open access]

Abstract: This position paper elaborates on three core themes that emerged from a panel discussion that was held at the 21st Congress of the European Association of Work and Organizational Psychology. The authors of this paper discussed the status quo and the future of Work and Organizational Psychology (WOP) research and practice amidst the advent of emerging workplace technologies. The discussion centred on the question of what role WOP scholars and practitioners should take within this interdisciplinary field and how future research should evolve from previous studies on automation. The paper systematically examines: (1) emerging technologies as a new type of technological change, (2) WOP's role in the design of emerging technologies and socio-technical systems, and (3) hindrances in WOP becoming more involved. Based on our reflections regarding each of these themes, we propose seven actionable recommendations to move forward and to encourage the involvement of WOP in the development and implementation of emerging technologies at work.

Vanroelen C, Padrosa SE, Gevaert J, Huegaerts K, Vos M, and Bosmans K. Precarious employment and mental health in the Belgian service voucher system: the role of working conditions and perceived financial strain. *International Archives of Occupational & Environmental Health*. 2024; 97(4):435-450.

<https://doi.org/10.1007/s00420-024-02057-z> [open access]

Abstract: Introduction: Jobs in domestic cleaning are often conceived as 'precarious employment' (PE)-i.e. a multidimensional concept referring to accumulated adverse characteristics of employment due to workers' weak bargaining position. Against this background, the Belgian service voucher system (SVS) was implemented aimed at creating formal and stable, subsidized domestic services jobs. Purpose: The current study assesses the relationship between PE and mental health (WHO5) in the Belgian SVS, accounting for the potential mediating role of working conditions and perceived financial strain at the household level. Methods: We analysed a cross-sectional sample of 1,115 Belgian SVS domestic cleaners, collected in 2019 through an online survey. A mediation model was estimated. Results: The crude effect of PE on adverse mental health was strong (β 0.545-S.E. 0.063). However, 50% of the association between PE and mental well-being was mediated by work task characteristics (quantitative demands, physical demands, task variation and autonomy) and 25% by household-level perceived financial strain. The remaining direct effect of PE on adverse mental well-being is β 0.066 (S.E. 0.032-25% of the total effect). Conclusion: These findings are the first based on the Belgian Employment Precariousness Scale (EPRES-BE) and are consistent with earlier-made-but seldom simultaneously tested-assumptions on the mechanisms relating PE to adverse mental health-i.e. involving direct associations and indirect associations via adverse working conditions and material deprivation. Based on the results, we recommend more democratic and higher-quality management practices in the SVS, in addition to higher wages and working time reduction.

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