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Journal articles marked with an asterisk indicate an IWH scientist or adjunct scientist is included in the list of authors.

***Jetha A, Tucker L, Backman C, Kristman VL, Bowring J, Hazel EM, Perlin L, Proulx L, Chen C, Gignac MAM. Rheumatic disease disclosure at the early career phase and its impact on the relationship between workplace supports and presenteeism. *Arthritis Care & Research*. 2021; [epub ahead of print].**

<https://doi.org/10.1002/acr.24620> [open access]

Abstract: BACKGROUND: Young adults with rheumatic disease face challenges communicating health needs, accessing workplace support and sustaining productivity. We examine whether disclosure modifies the relationship between workplace support and presenteeism. METHODS: An online survey was administered to Canadian young adults with rheumatic disease and asked about presenteeism (0=health had no effect on work; 10=health completely prevented working), workplace support need, availability and use and whether health details were disclosed to an immediate supervisor. A multivariable robust linear regression model was conducted and stratified by those who did and did not disclose the details of their health to their supervisor. RESULTS: 306 participants completed the survey with a mean presenteeism score of 4.9 (SD = 2.3). Over 70% disclosed health details to their supervisor; those who disclosed reported greater presenteeism (mean=5.2; SD=2.5) when compared to those who did not disclose (mean=4.2; SD=2.61). Greater disease severity was associated with disclosure. Half of participants reported unmet workplace support needs (53%), 32% reported that their workplace support needs were met and 15% reported exceeded workplace support needs. The relationship between presenteeism and workplace support needs were modified by disclosure. For participants who disclosed, unmet ($\beta= 1.59$,

95% CI 0.75, 2.43) and met workplace support needs ($\beta= 1.25$, 95% CI 0.39, 2.11) were associated with greater presenteeism when compared to those with exceeded workplace support needs. **CONCLUSION:** To address presenteeism, strategies should be developed for young adults with rheumatic disease to foster access to available workplace supports and navigate disclosure decisions

***Kokorelias KM, Gignac MAM, Naglie G, Rittenberg N, and Cameron JI. Caregivers' decision-making for health service utilisation across the Alzheimer's disease trajectory. Health and Social Care in the Community. 2021; [epub ahead of print].**

<https://doi.org/10.1111/hsc.13464>

Abstract: Health and social care services can enhance the community experiences of people with Alzheimer's disease and their caregivers but making decisions about service use is complex. Using a grounded theory methodology, we explored service use decision-making in 40 spousal and adult children caregivers for people with Alzheimer's disease across the caregiving and disease trajectory. Participants' perception of their initial service interactions influenced their decision-making process and use of services. Difficulties navigating the healthcare system and finding available services also influenced decision-making. Caregivers make decisions to sustain care in the community that change throughout the caregiving and disease trajectory. Two key factors influence service use (a) the goals of caregiving and (b) the practicalities of accessing services. Both factors change across caregiving phases. By expanding our understanding of how caregivers make service use decisions, we can augment future practice to help caregivers access services that can better support them across the disease trajectory

***Ross LE, Kinitz DJ, and Kia H. Pronouns are a public health issue. American Journal of Public Health. 2022; 112(3):360-362.**

<https://doi.org/10.2105/AJPH.2021.306678>

***Sharpe K, McGrail K, Mustard C, and McLeod C. A framework for understanding how variation in health care service delivery affects work disability management. Journal of Occupational Rehabilitation. 2022; [epub ahead of print].**

<https://doi.org/10.1007/s10926-021-10016-5>

Abstract: Introduction Differences in disability duration after work injury have been observed across jurisdictions, regions and urban and rural settings. A key aspect of effective disability management is the access and utilization of appropriate and high quality health care. This paper presents a framework for analyzing and thus understanding how health service spending and utilization vary across and within work disability management schemes and affect work disability management. Methods Our framework was developed through a literature review and policy analysis. Existing frameworks describing geographic variation in general health care systems identified factors believed to drive that variation. A review of policy and practice documents from Canada's no-fault cause-based work disability

management system identified factors relevant to work disability systems. Results We expand on previous frameworks by taking a systems approach that centers on factors relevant to the work disability management system. We further highlight predisposing, enabling, workplace environment and need-based factors that could lead to variation in health care spending and utilization across and within jurisdictions. These factors are described as shaping the interactions between workers, health care providers, employers and work disability management system actors, and influencing work disability management health and employment outcomes. Conclusion Our systems-focused approach offers a guide for researchers and policymakers to analyze how various factors may influence spending and utilization across regions and to identify areas for improvement in health care delivery within work disability management systems. Next steps include testing the framework in an analysis looking at geographic variation in spending and utilization across and within Canadian work disability management systems

Anand P, Allen HL, Ferrer RL, Gold N, Gonzales Martinez RM, Kontopantelis E, et al. Work-related and personal predictors of COVID-19 transmission: evidence from the UK and USA. *Journal of Epidemiology & Community Health*. 2022; 76(2):152-157.

<https://doi.org/10.1136/jech-2020-215208> [open access]

Abstract: OBJECTIVE: To develop evidence of work-related and personal predictors of COVID-19 transmission. SETTING AND RESPONDENTS: Data are drawn from a population survey of individuals in the USA and UK conducted in June 2020. BACKGROUND METHODS: Regression models are estimated for 1467 individuals in which reported evidence of infection depends on work-related factors as well as a variety of personal controls. RESULTS: The following themes emerge from the analysis. First, a range of work-related factors are significant sources of variation in COVID-19 infection as indicated by self-reports of medical diagnosis or symptoms. This includes evidence about workplace types, consultation about safety and union membership. The partial effect of transport-related employment in regression models makes the chance of infection over three times more likely while in univariate analyses, transport-related work increases the risk of infection by over 40 times in the USA. Second, there is evidence that some home-related factors are significant predictors of infection, most notably the sharing of accommodation or a kitchen. Third, there is some evidence that behavioural factors and personal traits (including risk preference, extraversion and height) are also important. CONCLUSIONS: The paper concludes that predictors of transmission relate to work, transport, home and personal factors. Transport-related work settings are by far the greatest source of risk and so should be a focus of prevention policies. In addition, surveys of the sort developed in this paper are an important source of information on transmission pathways within the community

Andersen LL, Skovlund SV, Vinstrup J, Geisle N, Sorensen SI, Thorsen SV, et al. Potential of micro-exercise to prevent long-term sickness absence in the general working population: prospective cohort study with register follow-up. *Scientific Reports*. 2022; 12(1):2280. <https://doi.org/10.1038/s41598-022-06283-8> [open access]

Abstract: This study assesses the potential of workplace-based micro-exercise (brief and simple exercise bouts) to prevent long-term sickness absence (LTSA) at the population level. In the Work Environment and Health in Denmark Study (2012-2018), we followed 70,130 workers from the general working population, without prior LTSA, for two years in the Danish Register for Evaluation of Marginalisation. We used Cox regression with model-assisted weights and controlled for various confounders. From 2012 to 2018, the percentage of workers in Denmark using workplace-based micro-exercise during and outside of working hours increased from 7.1 to 10.9% and from 0.8 to 1.4%, respectively. The incidence of long-term sickness absence (at least 30 days) was 8.4% during follow-up. The fully adjusted model showed reduced risk of long-term sickness absence from using micro-exercise during working hours, (HR 0.86, 95% CI 0.77-0.96), but not when used outside of working hours. If used by all workers, micro-exercise during working hours could potentially prevent 12.8% of incident long-term sickness absence cases (population attributable fraction). In conclusion, micro-exercise performed during working hours holds certain potential to prevent incident long-term sickness absence in the general working population. Large-scale implementation of workplace-based micro-exercise may represent an unexploited opportunity for public health promotion

Branicki L, Kalfa S, and Brammer S. Conceptualizing responsible return to work: corporate social responsibility in relation to employee return to work after cancer. *Work, Employment and Society*. 2021; 35(6):1091-1114. <https://doi.org/10.1177/0950017020955092>

Chong D, Chen L, Peng Y, and Yu A. Occupational noise-related perception and personal protection behavior among Chinese construction workers. *Safety Science*. 2022; 147:105629. <https://doi.org/10.1016/j.ssci.2021.105629>

Fujii R, Imai R, Shigetoh H, Tanaka S, and Morioka S. Task-specific fear influences abnormal trunk motor coordination in workers with chronic low back pain: a relative phase angle analysis of object-lifting. *BMC Musculoskeletal Disorders*. 2022; 23(1):161. <https://doi.org/10.1186/s12891-022-05118-x> [open access]

Abstract: BACKGROUND: Pain-related fear influences impaired trunk movement (e.g., limited movement of range and velocity), but it is unclear how fear relates to trunk motor coordination (e.g., a more "in-phase" upper-lower trunk motion pattern). We conducted the present study to: (1) identify the motor coordination pattern of the in-phase upper-lower lumbar movements during the lifting, and (2) determine how pain-related fear is related to

the trunk coordination pattern in workers with chronic low back pain (CLBP). **METHODS:** We examined 31 male workers with CLBP (CLBP group) and 20 healthy controls with no history of CLBP (HC group). The movement task was lifting a box, the weight of which was 10, 30%, or 50% of the subject's body weight. We used a 3D motion capture system to calculate the mean absolute relative phase angle (MARP) angle as an index of coordination and the mean deviation phase (DP) as an index of variability. We used a numerical rating scale to assess the subjects' task-specific fear. **RESULTS:** The MARP angle during trunk extension movement in the 50% condition was significantly decreased in the CLBP group compared to the HCs; i.e., the upper lumbar movement was more in-phase with the lower lumbar movement. The hierarchical multiple regression analysis results demonstrated that a decreased MARP angle was associated with high task-specific fear. **CONCLUSIONS:** A more 'in-phase' upper-lower lumbar movement pattern was predicted by task-specific fear evoked when performing a work-related activity. Our findings suggest that an intervention for task-specific fear may be necessary to improve an individual's impaired trunk motor coordination

Goncalves L, Sala R, and Navarro JB. Resilience and occupational health of health care workers: a moderator analysis of organizational resilience and sociodemographic attributes. *International Archives of Occupational & Environmental Health*. 2022; 95(1):223-232.

<https://doi.org/10.1007/s00420-021-01725-8> [open access]

Abstract: **OBJECTIVES:** Although previous studies have proposed a positive influence of resilience on the mental and physical health of health care workers, empirical evidence on its relationship with occupational health remains scarce. This study aimed to analyze the relationship between individual resilience and several occupational health indicators, as well as exploring the moderating role of organizational resilience and sociodemographic attributes on this relationship. **METHODS:** A cross-sectional design was used with a questionnaire applied to a sample of 325 workers from the Spanish health care sector. **RESULTS:** Individual resilience was significantly associated with the indicators of occupational health. A direct effect of individual resilience on job satisfaction was found. The influence of resilience on the perception of fatigue and suffering from an illness was reverse. Age moderated the impact of resilience on the perception of stress and medical leave. Besides, organizational resilience proved to be an important adjustment variable in job satisfaction and perception of stress. **CONCLUSIONS:** The findings show the relevance to take both individual and organizational resilience into account when applying intervention programs to improve the occupational health of health care workers

Hallock KF, Jin X, and Waldman M. The total compensation gap, wage gap and benefit gap between workers with and without a disability. *British Journal of Industrial Relations*. 2022; 60(1):3-31.

<https://doi.org/10.1111/bjir.12607> [open access]

Abstract: Abstract The wage gap between workers with and without a disability has been widely documented. However, wages and salaries account for less than 70% of the total hourly cost of compensation for an average U.S. worker. In this study, we construct a measure of total compensation by linking the American Community Survey to a restricted-access version of the Employer Cost for Employee Compensation database, which contains detailed benefit measures for the years 2008 -2014. After controlling for selection into full-time employment and other observed characteristics, we find that the percentage total compensation gap between full-time male workers with and without a disability is substantially larger than the percentage wage and salary gap. The opposite pattern is observed for full-time female workers. Our results suggest that considering only wage and salary may mask the true gaps in total compensation from employment. We also document a persistent benefits gap between workers with and without a disability. We discuss possible explanatory factors for the observed patterns in total compensation and benefit gaps

Hwang S and Beauregard TA. Contextualising intersectionality: a qualitative study of east Asian female migrant workers in the UK. *Human Relations*. 2022; 75(4):609-634.

<https://doi.org/10.1177/0018726721989790>

Kronenwett M and Rigotti T. Subjective achievement experiences at work and reduced depressivity: the mediating role of psychological need satisfaction. *European Journal of Work and Organizational Psychology*. 2021; 30(6):837-849.

<https://doi.org/10.1080/1359432X.2020.1862086>

Loh MY, Dollard MF, McLinton SS, and Tuckey MR. How psychosocial safety climate (PSC) gets stronger over time: a first look at leadership and climate strength. *Journal of Occupational Health Psychology*. 2021; 26(6):522-536.

<https://doi.org/10.1037/ocp0000308>

Abstract: Psychosocial safety climate (PSC) reflects the priority an organization sets for the psychological health and safety of its employees, important to predict future job design and worker health. PSC is assessed by aggregating employee perceptions to determine PSC level (mean scores) and strength (converging perceptions). Theoretically, the ideal climate is when PSC is high and strong, yet we do not know how to build these fundamentals. Since team leaders may transmit and shape PSC as set down by senior management, we explore their role (i.e., PSC and transformational leadership) in increasing and converging PSC perceptions in a team. We used three-wave longitudinal data (6-month lags) from 49 team leaders and 281 Australian health care workers nested in 49 teams. Multilevel analysis showed that team PSC levels increased over time. Using the consensus emergence model, PSC strength was

moderated by PSC leadership. Considering PSC starting levels, when low, high PSC leaders were associated with increasing PSC, but if starting levels were high, low PSC leaders were associated with decreasing PSC levels and strength while high PSC leaders were associated with sustaining PSC strength. Transformational leaders had smaller effects than PSC leaders on PSC levels and no effect on strength. Mid-leaders' values and actions for employee psychological health are important to build PSC level and sustain strength. In this, they can reinforce PSC certainty and its safety signal effect which is shown to be important for reducing psychological problems. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

Mailey EL, Rosenkranz R, Rosenkranz SK, Ablah E, Talley M, Biggins A, et al. Reducing occupational sitting while working from home: individual and combined effects of a height-adjustable desk and an online behavioral intervention. *Journal of Occupational & Environmental Medicine*. 2022; 64(2):91-98.

<https://doi.org/10.1097/JOM.0000000000002410>

Abstract: Objective: This study examined the individual and combined effects of a height-adjustable desk and an online behavioral intervention on sedentary behavior and health among university employees working from home. Methods: Participants (N = 95) were randomly assigned to one of four conditions: Desk Only, Program Only, Desk + Program, or Control. Desk participants received a height-adjustable desk; program participants received a 12-week web-based intervention. Outcomes measured at baseline and post-intervention included workday sitting and cardiometabolic health outcomes. Results: Reductions in sitting were largest in the Desk + Program condition (-206 min/workday; d = 1.84), followed by the Desk Only condition (-122 min/workday; d = 0.98), and the Program Only condition (-96 min/workday; d = 1.13). There were no significant changes in the health outcomes assessed. Conclusions: Both a height-adjustable desk and an online behavioral intervention effectively reduced occupational sitting, and a combined approach was most effective. Copyright © 2021 American College of Occupational and Environmental Medicine.

Perales F, Ablaza C, and Elkin N. Exposure to inclusive language and well-being at work among transgender employees in Australia, 2020. *American Journal of Public Health*. 2022; 112(3):482-490.

<https://doi.org/10.2105/AJPH.2021.306602>

Abstract: Objectives. To provide empirical evidence of the positive effects of exposure to inclusive language on trans employees' well-being. Methods. We leveraged unique data from a large Australian national survey of workplace diversity and inclusion (2020 Australian Workplace Equality Index Employee Survey), focusing on a subset of trans respondents (n=453). We derived self-reported and aggregate-level measures of exposure to trans-inclusive language and created a multidimensional index of employee well-being. We examined their relationships using fully adjusted random-intercept multilevel regression models. Results. We found strong, positive, and statistically significant associations between different indicators of exposure to inclusive language at work and trans employees' well-

being. These relationships were large in magnitude and emerged in the presence of an encompassing set of sociodemographic and workplace controls, including other markers of workplace diversity and inclusion (e.g., victimization experiences and identity disclosure). Conclusions. Our results provide robust evidence indicating that efforts to foster inclusive language at work can yield substantial, positive effects on trans people's feelings of belonging and inclusion, thereby contributing to their overall socioeconomic integration. (*Am J Public Health*. 2022;112(3):482-490. <https://doi.org/10.2105/AJPH.2021.306602>)

Quigley DD, Qureshi N, Gahlon G, and Gidengil C. Worker and employer experiences with COVID-19 and the California Workers' Compensation System: a review of the literature. *American Journal of Industrial Medicine*. 2022; 65(3):203-213.

<https://doi.org/10.1002/ajim.23326>

Abstract: BACKGROUND: Given workplace risks from COVID-19, California policymakers passed Senate Bill (SB) 1159 to facilitate access to workers' compensation (WC) benefits for frontline workers. However there has been no review of the available evidence needed to inform policy decisions about COVID-19 and WC. METHODS: We conducted a literature review on worker and employer experiences surrounding COVID-19 and WC, adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. RESULTS: Forty articles were included (16 about worker experiences and 24 about employer practices). Most were not about experiences and practices related to COVID-19 and WC. Worker studies indicated that paid sick leave reduced new COVID-19 cases and COVID-19 activity. Studies also found that rural agricultural and food processing workers lacked sick leave protection and faced severe housing and food insecurity. Studies on workplace health and safety indicated that healthcare workers with access to personal protective equipment had lower stress levels. Studies about employer practices found that unrestricted work in high-contact industries was associated with increased risks to at-risk workers, and with health disparities. No studies examined worker COVID-19 experiences and WC claims or benefits, job loss, retaliation, workers' medical care experiences, and return-to-work or leave practices. CONCLUSIONS: Our review identified experiences and practice related to COVID-19 and the WC system, but not specifically about WC and COVID-19 WC claims or benefits. Further research is needed to document and understand evidence underpinning the need for WC coverage for COVID-19 and to evaluate the impact of the current SB 1159 bill on WC in California

Ralston K, Everington D, Feng Z, and Dibben C. Economic inactivity, Not in Employment, Education or Training (NEET) and scarring: the importance of NEET as a marker of long-term disadvantage. *Work, Employment and Society*. 2021; 36(1):59-79.

<https://doi.org/10.1177/0950017020973882>

Spilchuk V, Arrandale VH, and Armstrong J. Potential risk factors associated with COVID-19 in health care workers. Occupational Medicine. 2022; 72(1):35-42.

<https://doi.org/10.1093/occmed/kgab148> [open access]

Abstract: BACKGROUND: Health care workers (HCWs) have been recognized as being at higher risk for coronavirus disease 2019 (COVID-19) infection; however, relevant factors and magnitude have not been clearly elucidated. AIM: This study was aimed to describe COVID-19 infections among hospital employees at a large tertiary care hospital located in Ontario, Canada from March to July 2020, towards better understanding potential risk factors. METHODS: Data on all HCWs with either a positive COVID test or a high-risk exposure from March to July 2020 were analyzed. HCWs with positive COVID test results and high-risk exposures were described. Those who developed COVID-19 following high-risk exposure were compared to those who did not. Data were also analyzed to determine trends over time. RESULTS: Over the period of observation, 193 staff (2% of total working staff) had a positive COVID-19 test. Incidence of HCW infections closely followed community incidence. Overall, 31% of COVID-19 cases were deemed occupationally acquired. Of these, 41% were acquired from a patient, with the remainder (59%) from fellow staff. Over the same period, 204 staff were identified as having a high-risk exposure. The majority of exposures (55%) were patient-associated, with the remaining (45%) resulting from staff-to-staff contact. Overall, 13% went on to develop COVID-19. Of these cases, 58% were patient-associated and 42% were a result of staff-to-staff transmission. CONCLUSIONS: HCWs are at risk for work-related COVID-19. Given the number of infections attributed to staff-staff transmission, greater attention could be paid to implementing prevention measures in non-clinical areas

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