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

**\*Farragher J, Khan UK, Yau K, Stewart KE, Harrison TG, Engel L, et al. Interventions to improve cognitive performance in chronic kidney disease: a scoping review. PLoS ONE. 2025; 20(8):e0329815.**

<https://doi.org/10.1371/journal.pone.0329815> [open access]

**Abstract:** Rationale & objective: Cognitive impairment is commonly associated with chronic kidney disease (CKD). A number of intervention approaches have the potential to improve cognitive performance in CKD. Our objective was to characterize interventions studied to improve cognitive performance for adults with CKD across all categories of severity, including kidney failure. Study design: Scoping review following JBI methodology. Setting and study populations: Adults ( $\geq 18$  years) with CKD or kidney failure. Selection criteria for studies: We searched 5 electronic databases for studies published up to April 5, 2024. Eligible sources were primary research studies that investigated any intervention targeting cognition in adults ( $\geq 18$  years) with CKD or kidney failure. Full-text article screening was performed in duplicate. Data extraction: Characteristics of interventions, populations studied, and outcomes investigated. Analytical approach: Descriptive statistics and narrative syntheses. Results: Seventy-one studies were included. Over half ( $n = 37$ , 52%) were conducted within the past five years, and most studies ( $n = 47$ , 66%) targeted people on maintenance hemodialysis therapy. Just over one-third of studies investigated pharmacological interventions, with much of the pharmacological or medical research focusing on anemia management or dialysis adequacy. Although recent research has expanded in focus, many other purported mechanisms of cognitive dysfunction in CKD remain understudied in interventional research. Exercise training ( $n = 14$ ) was the most common nonpharmacological approach studied, but few studies have explored other promising nonpharmacological approaches such as cognitive rehabilitation interventions. Limitations: Abstract

screening not performed in duplicate; non-English studies excluded. Conclusion: Research into cognitive interventions for people with kidney disease has primarily focused on the hemodialysis population and investigated erythropoietin stimulating agents, frequent or prolonged dialysis, and exercise, although there has been recent growth of research activity into other interventions. Future research should aim to address a broader range of purported pathophysiological mechanisms of cognitive impairment in CKD, investigate interventions for predialysis and peritoneal dialysis patients, and explore the impacts of established cognitive rehabilitation approaches.

**\*Shahidi FV, Wang L, Comeau J, Edwards J, Wahi G, Siddiqi A, et al. Parental employment quality during childhood and mental health in adolescence: a 10-year longitudinal study. *Social Science & Medicine*. 2025; 383:118482.**

<https://doi.org/10.1016/j.socscimed.2025.118482> [open access]

Abstract: Socioeconomic conditions play an important role in shaping the mental health outcomes of children and youth. Socioeconomic disadvantage in early life is often a product of precarious parental employment. Although more and more parents are participating in the workforce, a growing share of working parents rely on jobs that are insecure, unstable, and low paying. Against the backdrop of these trends, we examined the relationship between parental employment quality during childhood and mental health in adolescence among dual-parent families in Canada. Data were drawn from the National Longitudinal Survey of Children and Youth (n = 3955). We used latent class analysis to construct longitudinal and multidimensional profiles of maternal and paternal employment quality across early (ages 4-5), middle (ages 8-9), and late (ages 12-13) childhood. We then quantified associations between childhood profiles of parental employment quality and emotional and behavioural difficulties in adolescence (ages 14-15). Latent class analysis identified three types of household employment arrangements: 'High Quality', 'Primary Earner', and 'Precarious'. After adjusting for baseline child, parent, and household characteristics, parental employment quality during childhood was a significant predictor of emotional (but not behavioural) difficulties. Relative to their counterparts in the 'High Quality' group, adolescents exposed to 'Primary Earner' and 'Precarious' parental employment were nearly twice as likely to report serious emotional difficulties. We conclude that low-quality (e.g., precarious) parental employment contributes to the mental health challenges that young people face, reinforcing the importance of stable and rewarding jobs for fostering the emotional well-being of children and youth.

**Abrahams S. Unequal job security, unemployment scarring, and the distribution of welfare in a search and bargaining model. *Labour*. 2025; 39(3):189-205.**

<https://doi.org/10.1111/labr.70001>

**Burtch G, Greenwood B, and Ravindran K. Lucy and the chocolate factory: warehouse robotics and worker safety. *ILR Review*. 2025; 78(4):587-613.**

<https://doi.org/10.1177/00197939251333754> [open access]

Abstract: The authors examine the implications of robotics for warehouse worker safety. While warehouse automation has the potential to reduce injuries by eliminating high-risk tasks, it may also increase injuries among remaining non-automated tasks because of reduced task variety and an accelerated pace of work. Findings provide evidence of both effects: Warehouse robotics are associated with a 40% decrease in severe injuries but a 77% increase in non-severe injuries. The authors provide subsequent evidence that the rise in non-severe injuries is at least partially

attributable to the increased pace of work at robotics facilities. The implications of the findings for regulators, policymakers, workers, and firms are discussed.

**Deady M, Morris RW, Harvey SB, and Glozier N. Changing prevalence of psychosocial occupational stressors and their impact on employee mental health across birth cohorts. *Journal of Epidemiology & Community Health*. 2025; 79(8):607-613.**

<https://doi.org/10.1136/jech-2024-223096>

**Abstract:** Background: Mental illness is the leading cause of employee absence and vocational disability in many countries. The Job Demand-Control model posits that risk factors for mental illness include psychosocial stressors such as high job demands and low job control. We determined (1) if the prevalence of population-level work-related risk factors has changed over time (workplace change) and (2) whether the strength of the association between risk factors and mental health has changed over time (workforce change). Methods: Using a nationally representative Australian longitudinal panel survey (N=19 499), we estimated the linear trend in prevalence of psychosocial stressors between 2001 and 2020. The strength of the association (marginal effects) of psychosocial stressors with mental health was calculated and differences between birth cohorts were tested. Results: Over two decades, the population prevalence of high job demands increased (Byear (95% CI) = 0.017 (0.014, 0.021)); while there was no trend in low job control (Byear (95% CI) = 0.001 (-0.002, 0.004)). Moreover, the negative effect of job demands (highly stressful or potentially illness inducing) on mental health was greater in the youngest cohort (B1990s-1980s(SE)=-0.21 (0.08), and -0.41 (0.09), while the benefit of control (having a lot of say at work) was less (B1990s-1980s(SE)=-0.35 (0.07)). Conclusion: Not only do employees increasingly view work as demanding, but the negative impact of this on younger employee mental health is greater, while younger workers benefit less from workplace autonomy than previous cohorts. These findings, compounding mental health trends in adolescents, will result in younger generations of employees at greater risk of mental illness unless employers, insurers and regulators adapt.

**Enix C, Keniston A, Jenkins A, Westcott C, Furfari K, Daya S, et al. Defusing disruption: a rapid qualitative analysis examining hospitalist experiences navigating behavioral escalation events. *Journal of Hospital Medicine*. 2025; [epub ahead of print].**

<https://doi.org/10.1002/jhm.70121>

**Abstract:** BACKGROUND: Behavioral escalation events have become commonplace in the acute care setting. Disruptive patient behaviors contribute to workplace injuries and can compromise patient care and safety. Despite frequently encountering behavioral escalation, limited research exists on hospitalists' practices and perspectives when addressing disruptive behaviors. OBJECTIVE: To explore hospitalists' experiences and perspectives when navigating behavioral escalation events in adult acute care settings. METHODS: We conducted a rapid qualitative study on February 10, 2023, with four semi-structured virtual focus groups involving 27 hospital medicine participants across 19 US hospitals via the Hospital Medicine Reengineering Network (HOMERuN). Discussions examined hospitalist experiences with behavioral escalation and perspectives on response strategies. RESULTS: Our rapid qualitative study identified four key themes. (1) Many hospitals lack strategies to identify patients or situations at risk of behavioral escalation. (2) Interdisciplinary collaboration is considered essential, yet dedicated response teams are often unavailable. (3) Lack of standardized approaches to disruptive behaviors and inadequate hospitalist training in de-escalation may lead to varied responses. (4)

Limited proactive measures to anticipate escalation and inconsistent use of EHR behavioral alerts may unintentionally stigmatize patients. **CONCLUSION:** Behavioral escalation events in the acute care setting pose significant risks to patient and staff safety while disrupting healthcare delivery. Participants highlighted limited strategies to anticipate behavioral escalation, inconsistent interdisciplinary team response structures, and minimal opportunity for debriefing or event review. Focus groups emphasized the need for systems that support team-based de-escalation training and incorporate bias and equity considerations into behavioral response practices

**Fabius R, Bildner M, Goldfarb NI, Kirshenbaum D, Thayer D, Kiwi IR, et al. Advancing employer cultures of health and well-being: lessons for business coalitions and employers. Journal of Occupational & Environmental Medicine. 2025; 67(8):581-587.**

<https://doi.org/10.1097/JOM.0000000000003414> [open access]

Abstract: **OBJECTIVE:** The aim of the study was to determine the impact of a collaborative effort by employers to improve their organizations' cultures of health and well-being. **METHODS:** The Centers for Disease Control and Prevention Foundation partnered with two organizations to help employers use an established methodology—an industry-validated baseline assessment, along with a strategic roadmap and guidance from physician executive experts. Employers implemented this approach and simultaneously participated in a structured monthly learning collaborative. **RESULTS:** The average projected improvement in the culture of health scores from baseline to year end was 80 points, moving from 60% to 71% achievement of the benchmark score. **CONCLUSIONS:** This research demonstrates that employers working collaboratively and following an appropriate sequence of scientific-based approaches can demonstrate a positive trend in organizational cultures of health and well-being scores pointing to the possibility of sustainable culture change

**Grant A, Adams NN, MacIver E, Skatun D, Scott N, Kennedy C, et al. Long COVID in healthcare workers: longitudinal mixed-methods study. Occupational Medicine. 2025; 75(3):171-178.**

<https://doi.org/10.1093/occmed/kqae113> [open access]

Abstract: **Background:** Healthcare workers (HCWs) report higher rates of long coronavirus disease (COVID) (LC) than other occupational groups. It is still unclear whether LC is a lifelong condition. Workforce shortfalls are apparent due to sick leave, reduced hours and lower productivity. **Aims:** To investigate the lived experience of LC on a range of HCWs, including impact on health-related quality-of-life (HRQL), use of health services, working and personal lives and household finances. **Methods:** Longitudinal mixed methods with online surveys and qualitative interviews 6-months apart. HCWs including healthcare professionals, ancillary and administration staff who self-report LC were recruited through social media and National Health Service channels. Interviewees were purposively sampled from survey responses. **Results:** The first survey was completed by 471 HCWs (S1) and 302 (64%) the follow-up (S2). A total of 50 HCWs were interviewed initially and 44 at second interview. All participants experienced various relapsing, remitting, changing and prolonged LC symptoms (mean 7.1 [SD 4.8] at S2) and a third reported day-to-day activities 'limited a lot'. Most participants were working in a reduced capacity: reduced hours, different role or location. Healthcare was limited, and often unsatisfactory. Participants feared reinfection, their future, ability to work and financial security (59% (n = 174) at S2). They experienced stigma, distress, grief for their former self and some felt unsupported, however, as awareness of LC grew some experienced improved understanding and support. **Conclusions:** Most participants continued working, managing complex and dynamic

symptoms effecting their everyday life and ability to work. Most did not report significant improvements over time and feared for their future and financial security.

**Hijdra R, Oude Groeniger J, Burdorf A, and Schuring M. The effect of mental health problems on having a 'neither in employment nor in education or training' period and the mediating role of high school dropout: a register-based study with a 14-year follow-up. *Journal of Epidemiology & Community Health*. 2025; 79(8):600-606.**

<https://doi.org/10.1136/jech-2024-222197> [open access]

**Abstract:** Introduction: This study investigates (1) whether mental health problems among individuals aged 12-15 years impact (a) high school dropout (ages 16-20 years) and (b) having a 'neither in employment nor in education or training' (NEET) period (ages 21-26 years); (2) the process of mediation and interaction by high school dropout in the association between mental health problems and NEET; and (3) whether these associations differ based on (non-)employment and mental health problems of parents. Methods: Longitudinal register data were used (n=196 227). Log-linear regression analyses were used to assess the association between reimbursed medication for mental health problems and high school dropout or NEET period for at least 12 months. Causal mediation analysis was used to assess the mediation and interaction effects of high school dropout in the association between mental health problems and NEET. Stratified analyses were performed based on parental employment and mental health status. Results: Mental health problems were strongly associated with high school dropout (RR 1.96, 95% CI 1.88; 2.04) and NEET (RR 2.44, 95% CI 2.35; 2.52). High school dropout had a small mediating effect in the relationship between mental health problems and NEET. Individuals with parents with mental health problems or non-employment more often experienced high school dropout and being NEET, but the mediating effect of dropout on NEET was lower in these individuals. Conclusion: Preventing mental health problems early in the lifecourse is of paramount importance to promote educational outcomes and employment participation, but high school dropout only plays a marginal role in this relationship.

**Kim CS, Kong JO, and Koo JW. Trauma counseling centers for psychological support to manage trauma from workplace injuries in Korea: a narrative review. *Ewha Medical Journal*. 2025; 48(1):e12.**

<https://doi.org/10.12771/emj.2025.e12> [open access]

**Abstract:** This review describes a psychological support service designed to address post-traumatic stress disorder in workers impacted by workplace injuries, assisting in their recovery and facilitating their return to work. It explores the rationale and context behind establishing trauma counseling centers for these individuals, along with the status, roles, future directions, and recommendations for these centers. The review details the operational framework and functions of the workplace injury trauma management program, the scope of the impacts of such injury, the groups targeted for crisis intervention, and the psychological interventions tailored to each stage of recovery. Initiated as a pilot project in 2018, trauma counseling centers for workers have gradually become more common, with 23 centers in operation across Korea as of 2024

**Leskinen T, Suorsa K, Pasanen J, Rovio S, Niinikoski H, Heinonen O, et al. Does accelerometer-measured physical activity and sedentary time differ between manual, in-office, hybrid and remote workers? *Occupational & Environmental Medicine*. 2025; 82(5):238-244.**

<https://doi.org/10.1136/oemed-2025-110105> [open access]

**Abstract:** Objectives: Studies on accelerometer-measured daily physical activity behaviour, especially among hybrid and remote workers, are scarce. We compared daily occupational and non-occupational physical activity and sedentary time among manual, in-office, hybrid and remote workers. In addition, physical activity behaviour during remote and office workdays among hybrid workers was compared. Methods: Daily physical activity behaviour was collected with wrist-worn accelerometers on =4 days from 133 Finnish workers (31 years, 61% women). Participants were divided into four groups according to their work modes: manual (n=32), in-office (n=49), hybrid (n=35) and remote workers (n=17). Differences in physical activity and sedentary time during workdays (separately for occupational and non-occupational time) between the groups were examined using generalised linear models. Linear mixed models were used for intra-individual differences among hybrid workers. Results: Workdays' occupational physical activity and sedentary time differed between the work mode groups ( $p < 0.0001$ ); the manual workers accumulated the highest occupational physical activity, while both hybrid and remote workers accumulated the highest occupational sedentary time. No differences in non-occupational behaviours were observed. Among hybrid workers, occupational sedentary time tended to be higher (26 min, 95% CI -2 to 53) during remote versus office workdays, but non-occupational behaviours were similar. Conclusions: Remote work is associated with the lowest physical activity and the highest sedentary time compared with other work modes. Strategies to promote physical activity during remote workdays may be needed.

**Pan KY, Nevriana A, Almroth M, and Falkstedt D. Person-related work and the risk of type 2 diabetes: a Swedish register-based cohort study. *Occupational & Environmental Medicine*. 2025; 82(4):161-167.**

<https://doi.org/10.1136/oemed-2025-110088> [open access]

**Abstract:** OBJECTIVES: Person-related work requires workers to interact with individuals not employed at the workplace, such as clients and patients, and can cause emotional labour and conflict. These stressors may increase workers' risk of type 2 diabetes, but their impact may differ depending on the level of support received from colleagues. We aimed to examine the association between person-related work and the risk of type 2 diabetes, and the effect modification of social support at work. METHODS: The study population consisted of around three million people without type 2 diabetes in Sweden in 2005, who were employed and aged 30-60 years. Three dimensions of person-related work-general contact with people, emotional demands and confrontation-and social support were respectively assessed using job exposure matrices. Patients with type 2 diabetes in 2006-20 were determined based on drug, patient and death registers. Multivariable Cox regression models were used. RESULTS: High exposures to emotional demands and confrontation were respectively associated with 20% and 15% increased risks of type 2 diabetes in men and 24% and 20% in women. In both men and women, there was statistically significant effect modification by social support-the associations between emotional demands and confrontation and type 2 diabetes were higher among those with low social support than those with high social support. CONCLUSIONS: In both men and women, dimensions of person-related work, including emotional demands and confrontation, are

associated with an increased risk of type 2 diabetes, and low social support at work seems to amplify the magnitude of these associations

**Ren S, Ren S, Welton NJ, and Strong M. Quantitative bias analysis for unmeasured confounding in unanchored population-adjusted indirect comparisons. *Research Synthesis Methods*. 2025; 16(3):509-527.**

<https://doi.org/10.1017/rsm.2025.13> [open access]

Abstract: Unanchored population-adjusted indirect comparisons (PAICs) such as matching-adjusted indirect comparison (MAIC) and simulated treatment comparison (STC) attracted a significant attention in the health technology assessment field in recent years. These methods allow for indirect comparisons by balancing different patient characteristics in single-arm studies in the case where individual patient-level data are only available for one study. However, the validity of findings from unanchored MAIC/STC analyses is frequently questioned by decision makers, due to the assumption that all potential prognostic factors and effect modifiers are accounted for. Addressing this critical concern, we introduce a sensitivity analysis algorithm for unanchored PAICs by extending quantitative bias analysis techniques traditionally used in epidemiology. Our proposed sensitivity analysis involves simulating important covariates that were not reported by the comparator study when conducting unanchored STC and enables the formal evaluating of the impact of unmeasured confounding in a quantitative manner without additional assumptions. We demonstrate the practical application of this method through a real-world case study of metastatic colorectal cancer, highlighting its utility in enhancing the robustness and credibility of unanchored PAIC results. Our findings emphasise the necessity of formal quantitative sensitivity analysis in interpreting unanchored PAIC results, as it quantifies the robustness of conclusions regarding potential unmeasured confounders and supports more robust, reliable, and informative decision-making in healthcare

**Schlachter S, Inceoglu I, McDowall A, and Cropley M. Work-related technology use during nonwork time and its consequences: a resource-oriented perspective. *Journal of Occupational and Organizational Psychology*. 2025; 98(3):e70047.**

<https://doi.org/10.1111/joop.70047> [open access]

Abstract: Abstract Employees increasingly use information and communication technologies (i.e., ICTs) to work during nonwork time (e.g., responding to e-mails, taking calls), even when not contractually required. Despite potential work-related benefits, voluntary work-related ICT use can affect employees' recovery and well-being. Drawing on the conservation of resources theory and self-regulation, we argue that engaging in voluntary ICT use during workday evenings is a work-related resource investment, requiring self-regulatory resources. Consequently, employees lack such resources to regulate their attention away from work, thus experiencing reduced psychological detachment. This, in turn, can impede employees' ability to engage in mood repair regarding affective well-being at bedtime and the following morning. We propose that employees can alleviate this process through substituting and replacing self-regulatory resources by having control over their evening and good sleep quality, respectively. Conducting a daily diary study over five consecutive workdays and following mornings with 187 participants, we found negative indirect effects of voluntary ICT use on affective well-being the following morning, via reduced psychological detachment. Feeling in control during nonwork time and sleep quality mitigated these effects. Our

study contributes to the conceptual understanding of voluntary ICT use and how this behaviour can be managed more actively by individuals

**Soini S, Ryyanen KR, Nissinen S, Miettunen J, and Ala-Mursula L. Assessing the work relatedness of diagnoses in occupational health primary care appointments: a 3-year review of electronic medical records. *Occupational & Environmental Medicine*. 2025; 82(4):176-182.**

<https://doi.org/10.1136/oemed-2024-109991> [open access]

**Abstract:** OBJECTIVES: This is the first study to use real-life electronic medical record data from occupational health (OH) primary care to evaluate how often physicians assess and confirm diagnoses' work relatedness (the definition implying causal or aggravating factors at work) in relation to the physicians' expertise, allocated appointment time and type of diagnosis. METHODS: We analysed registered data on face-to-face appointments with an occupational physician (n=70 163) at a Finnish OH service provider in 2020-2022, using cross tabulations and logistic regression to estimate the likelihood of assessments and conclusions that the diagnoses are work related, depending on whether the physician was specialised in OH, the appointment duration and the diagnoses' International Classification of Diseases-10 (ICD-10) categories. RESULTS: The work relatedness of diagnoses was assessed in 58.1% of appointments, most likely when appointments were longer and diagnoses belonged to the ICD-10 categories of injuries, mental disorders and rarely used 'other reasons for visiting healthcare' category. The main diagnosis was considered work related in 8.9% of the appointments, more likely when the physician was an OH specialist and the appointments were longer. In the adjusted models, the highest ORs (OR, 95% CI) for the diagnoses being classed as work related were in cases of mental disorders (5.82, 5.01 to 6.76), musculoskeletal diseases (7.46, 6.66 to 8.35) and injuries (18.14, 16.06 to 20.48). CONCLUSION: Although a requirement, work relatedness was assessed in less than 60% of the appointments in OH primary care. Work-related diseases were rarely confirmed. Further research is required to find factors that could improve such assessments

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