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**May 7, 2021**

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**\*Chow N, Hogg-Johnson S, Mior S, Cancelliere C, Injeyan S, Teodorczyk-Injeyan J, et al. Assessment of studies evaluating spinal manipulative therapy and infectious disease and immune system outcomes: a systematic review. JAMA Network Open. 2021; 4(4):e215493.**

<https://doi.org/10.1001/jamanetworkopen.2021.5493> [open access]

Abstract: IMPORTANCE: Claims that spinal manipulative therapy (SMT) can improve immune function have increased substantially during the COVID-19 pandemic and may have contributed to the rapid spread of both accurate and inaccurate information (referred to as an infodemic by the World Health Organization). OBJECTIVE: To identify, appraise, and synthesize the scientific literature on the efficacy and effectiveness of SMT in preventing the development of infectious disease or improving disease-specific outcomes in patients with infectious disease and to examine the association between SMT and selected immunological, endocrine, and other physiological biomarkers. EVIDENCE REVIEW: A literature search of MEDLINE, the Cumulative Index to Nursing and Allied Health Literature, the Index to Chiropractic Literature, the Cochrane Central Register of



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Controlled Trials, and Embase was conducted from inception to April 15, 2020. Randomized clinical trials and cohort studies were included. Eligible studies were critically appraised, and evidence with high and acceptable quality was synthesized using the Synthesis Without Meta-Analysis guideline. FINDINGS: A total of 2593 records were retrieved; after exclusions, 50 full-text articles were screened, and 16 articles reporting the findings of 13 studies comprising 795 participants were critically appraised. The literature search found no clinical studies that investigated the efficacy or effectiveness of SMT in preventing the development of infectious disease or improving disease-specific outcomes among patients with infectious disease. Eight articles reporting the results of 6 high- and acceptable-quality RCTs comprising 529 participants investigated the effect of SMT on biomarkers. Spinal manipulative therapy was not associated with changes in lymphocyte levels or physiological markers among patients with low back pain or participants who were asymptomatic compared with sham manipulation, a lecture series, and venipuncture control groups. Spinal manipulative therapy was associated with short-term changes in selected immunological biomarkers among asymptomatic participants compared with sham manipulation, a lecture series, and venipuncture control groups. CONCLUSIONS AND RELEVANCE: In this systematic review of 13 studies, no clinical evidence was found to support or refute claims that SMT was efficacious or effective in changing immune system outcomes. Although there were limited preliminary data from basic scientific studies suggesting that SMT may be associated with short-term changes in immunological and endocrine biomarkers, the clinical relevance of these findings is unknown. Given the lack of evidence that SMT is associated with the prevention of infectious diseases or improvements in immune function, further studies should be completed before claims of efficacy or effectiveness are made

**\*O'Loughlin RA, Kristman VL, and Gilbeau A. Inclusion of Indigenous workers in workplace mental health. Equality, Diversity and Inclusion. 2021; [epub ahead of print].**

<https://doi.org/10.1108/EDI-07-2020-0176> [open access]

Abstract: Purpose This paper highlights inclusion issues Indigenous people experience maintaining their mental health in the workplace. Design/methodology/approach Using a grounded theoretical



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approach, five sharing circles were conducted with the Nookiiwin Tribal Council's community members to better understand inclusivity issues related to workplace mental health. Findings Five themes emerged from the data related to enhancing inclusivity and workplace mental health for Indigenous workers: (1) connecting with individuals who understand and respect Indigenous culture; (2) respecting Indigenous traditions; (3) hearing about positive experiences; (4) developing trusting relationships and (5) exclusion is beyond the workplace. Research limitations/implications The next step is to finalize development of the Wiji app and evaluate the effectiveness of the app in helping Indigenous workers feel included at work and to improve workplace mental health. If effective, the Indigenous-developed e-mental health app will be promoted and its benefits for helping Indigenous workers feel included at work and also for providing accessible mental health resources, will be known. In the future, other Indigenous groups may be potentially interested in adopting a similar application in their workplace(s). Originality/value There is very little known about inclusivity issues related to Indigenous workers' maintaining their mental health. This paper identifies major issues influencing the exclusion and inclusion of Indigenous workers

**\*Pope JE, Rampakakis E, Movahedi M, Cesta A, Sampalis JS, and Bombardier C. Time to remission in swollen joints is far faster than patient reported outcomes in rheumatoid arthritis: results from the Ontario Best Practices Research Initiative (OBRI). *Rheumatology*. 2021; 60(2):717-727.**

<https://doi.org/10.1093/rheumatology/keaa343>

Abstract: Objectives: RA patients are often not in remission due to patient global assessment of disease activity (PtGA) included in disease activity indices. The aim was to assess the lag of patient-reported outcomes (PROs) after remission measured by clinical disease activity index (CDAI) or swollen joint count (SJC28).

Methods: RA patients enrolled in the Ontario Best Practices Research Initiative registry not in low disease state at baseline with at =6 months of follow-up, were included. Low disease state was defined as CDAI = 10, SJC28 = 2, PtGA = 2cm, pain score = 2cm, or fatigue = 2cm. Remission included CDAI = 2.8, SJC28 = 1, PtGA = 1cm, pain score = 1cm, or fatigue = 1cm. Time to first low disease



state/remission based on each definition was calculated overall and stratified by early vs established RA. Results: A total of 986 patients were included (age 57.4 (12.9), disease duration 8.3 (9.9) years, 80% women). The median (95% CI) time in months to CDAI = 10 was 12.4 (11.4, 13.6), SJC28 = 2 was 9 (8.2, 10), PtGA = 2cm was 18.9 (16.1, 22), pain = 2cm was 24.5 (19.4, 30.5), and fatigue = 2cm was 30.4 (24.8, 31.7). For remission, the median (95% CI) time in months to CDAI = 2.8 was 46.5 (42, 54.1), SJC28 = 1 was 12.5 (11.4, 13.4), PtGA = 1cm was 39.6 (34.6, 44.8), pain = 1cm was 54.7 (43.6, 57.5) and fatigue = 1cm was 42.6 (36.8, 48). Time to achieving low disease state and remission was generally significantly shorter in early RA compared with established RA with the exception of fatigue. Conclusion: Time to achieving low disease state or remission based on PROs was considerably longer compared with swollen joint count. Treating to a composite target in RA could lead to inappropriate changes in DMARDs.

**Bennett AA, Campion ED, Keeler KR, and Keener SK.**  
**Videoconference fatigue? Exploring changes in fatigue after videoconference meetings during COVID-19. Journal of Applied Psychology. 2021; 106(3):330-344.**

<https://doi.org/10.1037/apl0000906>

Abstract: In response to the Coronavirus disease 2019 (COVID-19) global health pandemic, many employees transitioned to remote work, which included remote meetings. With this sudden shift, workers and the media began discussing videoconference fatigue, a potentially new phenomenon of feeling tired and exhausted attributed to a videoconference. In the present study, we examine the nature of videoconference fatigue, when this phenomenon occurs, and what videoconference characteristics are associated with fatigue using a mixed-methods approach. Thematic analysis of qualitative responses indicates that videoconference fatigue exists, often in near temporal proximity to the videoconference, and is affected by various videoconference characteristics. Quantitative data were collected each hour during five workdays from 55 employees who were working remotely because of the COVID-19 pandemic. Latent growth modeling results suggest that videoconferences at different times of the day are related to deviations in employee fatigue beyond what is expected based on typical fatigue trajectories. Results from multilevel



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modeling of 279 videoconference meetings indicate that turning off the microphone and having higher feelings of group belongingness are related to lower postvideoconference fatigue. Additional analyses suggest that higher levels of group belongingness are the most consistent protective factor against videoconference fatigue. Such findings have immediate practical implications for workers and organizations as they continue to navigate the still relatively new terrain of remote work. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

**Bethge M, Spanier K, Kohn S, and Schlumbohm A. Self-reported work ability predicts health-related exit and absence from work, work participation, and death: longitudinal findings from a sample of German employees. *International Archives of Occupational & Environmental Health*. 2021; 94(4):591-599.**

<https://doi.org/10.1007/s00420-020-01608-4> [open access]

**Abstract:** OBJECTIVE: The cohort study examined the performance of the Work Ability Index in predicting health-related exit and absence from work, work participation, and death among a sample of workers previously receiving sickness absence benefits. METHODS: Workers aged 40-54 years who received sickness absence benefits in 2012 completed the Work Ability Index in 2013. Outcomes were extracted from administrative data records covering the period until the end of 2016. RESULTS: Data for 2266 participants were included (mean age: 47.9 years; 54.4% women). Maximum follow-up was 43 months. In terms of work ability, 38.4% had good scores, 38.2% moderate scores, and 23.4% poor scores. Fully adjusted analyses showed an increased risk of a disability pension in workers with poor (HR=12.98; 95% CI 5.81-28.99) and moderate Work Ability Index scores (HR=3.17; 95% CI 1.36-7.38) compared to workers with good or excellent scores. The risk of a rehabilitation measure was also significantly increased for workers with poor and moderate scores. In addition, poor scores were prospectively associated with a longer duration of sickness absence and unemployment benefits, and fewer employment days and less income from regular employment. Those with poor Work Ability Index scores also had a significantly increased risk of premature death. CONCLUSIONS: The Work Ability Index is a potential tool to identify individuals with previous long-term sickness



absence having an increased risk of health-related exit and absence from work and poor work participation outcomes

**Colindres C, Cohen A, and Caxaj CS. Migrant agricultural workers' health, safety and access to protections: a descriptive survey identifying structural gaps and vulnerabilities in the interior of British Columbia, Canada. International Journal of Environmental Research and Public Health. 2021; 18(7):3696. <https://doi.org/10.3390/ijerph18073696> [open access]**

Abstract: In this paper, we provide descriptive data that characterize the health, safety, and social care environment of migrant agricultural workers in British Columbia, Canada. Through the administration of surveys (n = 179), we gathered information in three domains: (1) living and working conditions; (2) barriers to rights, health, safety and advocacy/reporting; (3) accessibility of services. Our study confirms what predominantly qualitative studies and Ontario-based survey data indicate in terms of health, legal, and social barriers to care and protection for this population. Our findings also highlight the prevalence of communication barriers and the limited degree of confidence in government authorities and contact with support organizations this population faces. Notably, survey respondents expressed a strong intention to report concerns/issues to authorities while simultaneously reporting that they lacked the knowledge to initiate such complaints. These findings call into question government responses that task the agricultural industry with addressing access and service gaps that may be more effectively addressed by government agencies and service providers. In order to improve supports and protections for migrant agricultural workers, policies and practices should be implemented that: (1) empower workers to independently access health, social, and legal protections and limit workers' dependence on their employers when help-seeking; (2) provide avenues for increased proactive inspections, anonymous reporting, alternative housing/employment and meaningful 2-way communication with regulators so that the burden of reporting is lessened for this workforce; (3) systematically address breaches in privacy, translation, and adequate workplace injury assessments in the healthcare system. Ultimately, the COVID-19 context has put into sharper focus the complex gaps in health, social and legal services and protections for migrant agricultural workers. The close



chronology of our data collection with this event can help us understand the factors that have resulted in so much tragedy among this workforce

**d'Errico A, Zajacova J, Cacciatore A, Alfonzo S, Beatrice F, Ricceri F, et al. Exposure to occupational hazards and risk of sinonasal epithelial cancer: results from an extended Italian case-control study. Occupational & Environmental Medicine. 2021; 78(5):323-329.**

<https://doi.org/10.1136/oemed-2020-106738>

**Abstract:** OBJECTIVES: There is sufficient evidence for a causal association of sinonasal epithelial cancers (SNEC) only for exposure to wood and leather dusts, nickel compounds and employment in isopropyl alcohol production. The aim of this study was to assess whether other occupational hazards are associated with the risk of SNEC for the main histologic types, namely adenocarcinoma (AD) and squamous cell carcinoma (SCC). METHODS: The study population included 375 incident SNEC cases collected from 1996 to 2014 (79% of all diagnosed SNEC) throughout the Piedmont region by the regional Sinonasal Cancer Registry, and 408 hospital controls. Exposure to 17 occupational agents was assigned through expert assessment based on interviews to the subjects on jobs held throughout their working life. The relationship of SNEC with ever and cumulative exposure to the hazards was assessed through unconditional logistic regression models adjusted for age, sex, area of residence, smoking habit, year of enrolment and coexposures. RESULTS: AD was associated with both ever and cumulative exposure to wood dust, leather dust and organic solvents, and with cumulative exposure to textiles dusts. SCC risk was significantly increased by ever exposure to nickel, chromium and welding fumes, as well as by cumulative exposure to welding fumes, arsenic and organic solvents. A mixed group of other histological types was associated with both ever and cumulative exposure to wood dust and textile dusts. CONCLUSIONS: The associations of SNEC with wood dust, leather dust and nickel were confirmed, while some new associations were observed for other hazards, which merit further investigation



**Ferry F, Bunting B, Rosato M, Curran E, and Leavey G. The impact of reduced working on mental health in the early months of the COVID-19 pandemic: results from the Understanding Society COVID-19 study. Journal of Affective Disorders. 2021; 287:308-315.**

<https://doi.org/10.1016/j.jad.2021.03.042>

Abstract: Background: The COVID-19 pandemic has precipitated an unpredictable economic crisis, currently affecting daily life for millions of workers. We examined the mental health impact of reduced working in a nationally representative sample of employees. Method: We used Wave one (April 2020) of the Understanding Society UK Household Longitudinal Study (UKHLS) COVID-19 study, with linkage to baseline mental health data from the UKHLS annual survey (January 2017- December 2018). Analysis was based on adults aged 18-65 who were employees in January/February 2020 (n=8,708), with psychological distress assessed using the GHQ-12. Logistic regression examined the mental health impact of reduced working and reasons for the reduction. Results: Forty two percent of employees reported reduced working by April 2020, with 22% furloughed. There was no evidence of an association between reduced working per se and psychological distress in the fully adjusted model (OR=1.06, 95%CI 0.91-1.23). Those permanently laid-off (less than 1% of employees) were most vulnerable to adverse mental health effects in the early months of the pandemic (OR=3.60, 95%CI 1.55-8.37). We also found evidence of higher levels of psychological distress among those sick or self-isolating, and those with reduced working due to caring responsibilities. Limitations: While the GHQ is a widely used and validated instrument in identifying potential psychiatric disorders, it is important to note that it does not represent a clinical assessment. Conclusions: Longitudinal examination of employment transitions and mental ill-health related to pandemic outcomes is imperative and should help inform public health responses and ongoing government policy in supporting those adversely affected.

**Framke E, Sorensen OH, Pedersen LRM, Pedersen J, Madsen IEH, Bjorner JB, et al. Effects of a participatory organisational, core work task focused workplace intervention on employees' primary healthcare consultations: secondary analysis of a**



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**cluster RCT. Occupational & Environmental Medicine. 2020; 78(5):330-335.**

<https://doi.org/10.1136/oemed-2020-106558> [open access]

**Abstract:** Objectives: We aimed to examine whether a participatory organisational workplace intervention focusing on core tasks at work resulted in lower primary healthcare utilisation of employees. Methods: The cluster randomised controlled trial included 78 preschools, 44 allocated to the intervention group (1745 employees) and 34 allocated to the control group (1267 employees). The intervention aimed to involve employees in improving the psychosocial work environment while focusing on core tasks at work. Using Poisson regression, we tested the rate ratios (RRs) of consultations in the intervention compared with the control group in terms of all consultations in primary healthcare and general practitioner (GP) consultations, respectively, per person-year during 31 months of follow-up. The fully adjusted model included adjustment for sex, age, job group, workplace type and size, and previous primary healthcare utilisation. Results: During the follow-up, intervention group employees had 11.0 consultations/person-year, while control group employees had 11.6 consultations/person-year (RR 0.97, 95% CI 0.92 to 1.01). Employees in the intervention group had 7.5 GP consultations/person-year, while control group employees had 8.2 GP consultations/person-year (RR 0.95, 95% CI 0.90 to 0.99). Post hoc analyses indicated that the effect of the intervention was particularly strong in employees in preschools with a moderate or high level of implementation. Conclusions: The participatory organisational workplace intervention focusing on core tasks at work among preschool employees had a small, statistically non-significant effect on overall primary healthcare utilisation and a small, statistically significant effect on GP consultations. These results suggest a beneficial effect of the participatory organisational intervention on employees' health.

**Kuykendall L, Craig L, Stiksma M, and Guarino K. Understanding employees' unused vacation days: a social cognitive approach. Journal of Occupational Health Psychology. 2021; 26(2):69-85.**

<https://doi.org/10.1037/ocp0000182>

**Abstract:** Despite the benefits of vacations for health and well-being, many employees do not use all of their paid vacation days. In this



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article, we seek to understand why this occurs. Using a social cognitive perspective, we propose that employees use fewer vacation days when they do not believe they can successfully detach from work while on vacation (i.e., have low detachment self-efficacy), do not expect positive outcomes (e.g., feeling relaxed, connecting with loved ones) from their vacations, and expect negative outcomes (e.g., feeling stressed, facing negative financial consequences) from their vacations. We test this explanation across four studies in which we develop and validate measures for our social cognitive constructs (Studies 1-3) and test whether these constructs predict employees' unused vacation days (Study 4). Results revealed that employees had more unused vacation days if they lacked detachment self-efficacy, did not expect to feel relaxed on vacation, and expected negative financial consequences of vacations. Overall, our results highlight the usefulness of social cognitive theory for understanding employees' unused vacation days. We discuss implications for theory, future research, and practice. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

**Laloo D, Lewsey J, Katikireddi SV, Macdonald EB, and Demou E. Health, lifestyle and occupational risks in Information Technology workers. Occupational Medicine. 2021; 71(2):68-74. <https://doi.org/10.1093/occmed/kqaa222> [open access]**

Abstract: BACKGROUND: Information technology (IT) and the IT workforce are rapidly expanding with potential occupational health implications. But to date, IT worker health is under-studied and large-scale studies are lacking. AIMS: To investigate health, lifestyle and occupational risk factors of IT workers. METHODS: We evaluated self-reported health, lifestyle and occupational risk factors for IT workers in the UK Biobank database. Using logistic regression, we investigated differences between IT workers and all other employed participants. Regression models were repeated for IT worker subgroups (managers, professionals, technicians) and their respective counterparts within the same Standard Occupational Classification (SOC) major group (functional managers, science and technology professionals, science and technology associate professionals). RESULTS: Overall, 10 931 (4%) employed participants were IT workers. Compared to all other employed participants, IT workers reported similar overall health, but lower



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lifestyle risk factors for smoking and obesity. Sedentary work was a substantially higher occupational exposure risk for IT workers compared to all other employed participants (odds ratio [OR] = 5.14, 95% confidence interval [CI]: 4.91-5.39) and their specific SOC group counterparts (managers: OR = 1.83, 95% CI: 1.68-1.99, professionals: OR = 7.18, 95% CI: 6.58-7.82, technicians: OR = 4.48, 95% CI: 3.87-5.17). IT workers were also more likely to engage in computer screen-time outside work than all other employed participants (OR = 1.42, 95% CI: 1.35-1.51). CONCLUSIONS: Improved understanding of health, lifestyle and occupational risk factors from this, the largest to date study of IT worker health, can help inform workplace interventions to mitigate risk, improve health and increase the work participation of this increasingly important and rapidly growing occupational group

**Liao Z, Lee HW, Johnson RE, Song Z, and Liu Y. Seeing from a short-term perspective: when and why daily abusive supervisor behavior yields functional and dysfunctional consequences. Journal of Applied Psychology. 2021; 106(3):377-398.**

<https://doi.org/10.1037/apl0000508>

Abstract: Although destructive consequences for subordinates have featured prominently in the abusive supervision literature, scholars have insinuated that supervisory abuse may temporarily yield functional results. Drawing from research on motive attribution tendencies that underlie abusive supervision and the control perspective of repetitive thought, we develop and test a multilevel theory that delineates both functional and dysfunctional subordinate responses to daily abusive supervisor behavior. We posit that when subordinates generally attribute abusive supervision to performance promotion motives, abusive supervisor behavior during the day leads to task reflexivity that night, translating into within-subordinate increases in next-day task performance. In contrast, when subordinates generally attribute abusive supervision to injury initiation motives, abusive supervisor behavior during the day instead leads to rumination that night, resulting in within-subordinate increases in next-day leader-directed deviance. Results from 2 experience-sampling studies provide support for these predictions. By providing a more fine-grained understanding of both the adaptive and maladaptive consequences of daily abusive supervisor behavior, our



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research, together with prior studies, suggests that the short-lived instrumental outcomes of abusive supervisor behavior carry a substantial price, despite managers' illusion that acting in an abusive manner could be a feasible influence tactic. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

**Lin W, Shao Y, Li G, Guo Y, and Zhan X. The psychological implications of COVID-19 on employee job insecurity and its consequences: the mitigating role of organization adaptive practices. Journal of Applied Psychology. 2021; 106(3):317-329. <https://doi.org/10.1037/apl0000896>**

Abstract: The current study aims to understand the detrimental effects of COVID-19 pandemic on employee job insecurity and its downstream outcomes, as well as how organizations could help alleviate such harmful effects. Drawing on event system theory and literature on job insecurity, we conceptualize COVID-19 as an event relevant to employees' work, and propose that event strength (i.e., novelty, disruption, and criticality) of COVID-19 influences employee job insecurity, which in turn affects employee work and non-work outcomes. We also identified important organization adaptive practices responding to COVID-19 based on a preliminary interview study, and examined its role in mitigating the undesired effects of COVID-19 event strength. Results from a two-wave lagged survey study indicated that employees' perceived COVID-19 event novelty and disruption (but not criticality) were positively related to their job insecurity, which in turn was positively related to their emotional exhaustion, organizational deviance, and saving behavior. Moreover, organization adaptive practices mitigated the effects of COVID-19 event novelty and criticality (but not disruption) on job insecurity. Theoretical and practical implications are discussed. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

**Lu Y, Zhang Z, Gao S, Yan H, Zhang L, and Liu J. Association of occupational burnout and occupational exposure factors on psychological health among factory workers and miners: a propensity score analysis. International Archives of Occupational & Environmental Health. 2021; 94(3):441-450. <https://doi.org/10.1007/s00420-020-01587-6>**

Abstract: PURPOSE: This study is to explore the association of



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occupational burnout and occupational exposure factors on psychological health among factory workers and miners. **METHODS:** A total of 6130 factories workers and miners in Urumqi, China were included using a cluster sampling method. The occupational burnout and psychological health were investigated using the Chinese Maslach Burnout Inventory (CMBI) and the Symptom Check List-90 (SCL-90). The propensity score analysis (PSA) was used to eliminate the influence of individual characteristics, and 2164 pairs of participants on psychological healthy and unhealthy were matched. After PSA, the relationship between occupational burnout, occupational hazard exposure, and psychological health was evaluated. **RESULTS:** The results showed that asbestos dust (OR 1.65, CI 95% 1.35-2.02) and CMBI (OR 2.59, CI 95% 2.39-2.83) were risk factors affecting psychological health ( $P < 0.001$ ). **CONCLUSIONS:** Measures need to be taken to ease occupational burnout among factories workers and miners, and strengthen personal protection to improve their psychological health

**Mutambudzi M, Niedwiedz C, Macdonald EB, Leyland A, Mair F, Anderson J, et al. Occupation and risk of severe COVID-19: prospective cohort study of 120 075 UK Biobank participants. Occupational & Environmental Medicine. 2020; 78(5):307-314. <https://doi.org/10.1136/oemed-2020-106731>**

**Abstract:** Objectives: To investigate severe COVID-19 risk by occupational group. Methods: Baseline UK Biobank data (2006-10) for England were linked to SARS-CoV-2 test results from Public Health England (16 March to 26 July 2020). Included participants were employed or self-employed at baseline, alive and aged <65 years in 2020. Poisson regression models were adjusted sequentially for baseline demographic, socioeconomic, work-related, health, and lifestyle-related risk factors to assess risk ratios (RRs) for testing positive in hospital or death due to COVID-19 by three occupational classification schemes (including Standard Occupation Classification (SOC) 2000). Results: Of 120 075 participants, 271 had severe COVID-19. Relative to non-essential workers, healthcare workers (RR 7.43, 95% CI 5.52 to 10.00), social and education workers (RR 1.84, 95% CI 1.21 to 2.82) and other essential workers (RR 1.60, 95% CI 1.05 to 2.45) had a higher risk of severe COVID-19. Using more detailed groupings, medical support staff (RR 8.70, 95% CI 4.87



to 15.55), social care (RR 2.46, 95% CI 1.47 to 4.14) and transport workers (RR 2.20, 95% CI 1.21 to 4.00) had the highest risk within the broader groups. Compared with white non-essential workers, non-white non-essential workers had a higher risk (RR 3.27, 95% CI 1.90 to 5.62) and non-white essential workers had the highest risk (RR 8.34, 95% CI 5.17 to 13.47). Using SOC 2000 major groups, associate professional and technical occupations, personal service occupations and plant and machine operatives had a higher risk, compared with managers and senior officials. Conclusions: Essential workers have a higher risk of severe COVID-19. These findings underscore the need for national and organisational policies and practices that protect and support workers with an elevated risk of severe COVID-19.

**Taibi Y, Metzler YA, Bellingrath S, and Muller A. A systematic overview on the risk effects of psychosocial work characteristics on musculoskeletal disorders, absenteeism, and workplace accidents. *Applied Ergonomics*. 2021; 95:103434. <https://doi.org/10.1016/j.apergo.2021.103434>**

Abstract: The present article provides a systematic overview on the relationship between psychosocial work characteristics and musculoskeletal disorders, absenteeism, and workplace accidents. The study identified and reviewed the findings of 24 systematic reviews or meta-analysis and 6 longitudinal studies. Publications were systematically searched in several databases from 1966 to January 2021. To summarize the level of evidence, a best evidence synthesis was performed, and the quality of included studies was rated. High job demands, high job strain, high effort/reward-imbalance and low social support showed a strong evidence to increase the risk for musculoskeletal disorders. In addition to job demands and job strain, low perceived fairness proved to be a risk factor of absenteeism with strong evidence. Due to the small number of studies, no reliable evidence assessment for workplace accidents was possible. The summarized findings can improve risk assessment methods, by providing a systematic estimation of the potential risk severity of psychosocial work characteristics and assist practitioners in further developing the psychosocial risk assessment



**Yildiz B, Burdorf A, and Schuring M. The influence of chronic diseases and multimorbidity on entering paid employment among unemployed persons: a longitudinal register-based study. *Scandinavian Journal of Work, Environment & Health*. 2021; 47(3):208-216.**

<https://doi.org/10.5271/sjweh.3942> [open access]

**Abstract:** Objectives This study aimed to investigate the influence of chronic diseases and multimorbidity on entering paid employment among unemployed persons. A secondary objective was to estimate the proportion of persons not entering paid employment that can be attributed to specific chronic diseases across different age groups. Methods Data linkage of longitudinal nationwide registries on employment status, medication use and socio-demographic characteristics was applied. Unemployed Dutch persons (N=619 968) were selected for a three-year prospective study. Cox proportional hazards analyses with hazard ratios (HR) were used to investigate the influence of six common chronic diseases on entering paid employment, stratified by age. The population attributable fraction (PAF) was calculated as the proportion of all persons who did not enter paid employment that can be attributed to a chronic disease. Results Persons with chronic diseases were less likely to enter paid employment among all age groups. The impact of a chronic disease on maintaining unemployment at population level was largest for common mental disorders (PAF 0.20), due to a high prevalence of common mental disorders (6%), and for psychotic disorders (PAF 0.19), due to a high likelihood of not entering paid employment (HR 0.21), among persons aged 45-55 years. Multimorbidity increased with age, and the impact of having multiple chronic diseases on remaining unemployed increased especially among persons aged  $\geq$  45 years. Conclusion Chronic diseases and multimorbidity are important factors that reduce employment chances among all age groups. Our results provide directions for policy measures to target specific age and disease groups of unemployed persons in order to improve employment opportunities

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