INTRODUCTION



Chronic Health Conditions in the Workplace: Work Stressors and Supportive Supervision, Work Design, and Programs

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Abstract

A large and growing number of workers are managing chronic physical and mental health conditions while working, necessitating attention from both researchers and leaders and practitioners in organizations. Much of the current discourse around research and practice in this area is focused on prevention of chronic disease and rehabilitation of disability to help workers return to work. Less commonly attended to are workplace factors that can support the quality of working life and the longevity of working life for workers with chronic health conditions. This Special Issue contains a set of interdisciplinary articles examining common stressors for workers with chronic health conditions, including work-health conflict, anticipated stigma, and job insecurity. It also contains articles examining important supportive relational and social and motivational work design factors, including supervisor support, psychosocial safety climate (shared perceptions of work policies, practices, and procedures that are meant to protect worker psychological health and safety), sense of community, organizational fairness, and health-related leeway (freedom available to workers to self-regulate work activities while self-managing day-to-day symptom fluctuations). The focal populations in this set of articles include, broadly, workers with various types of chronic health conditions, and more specifically, workers with mental health conditions, workers with diabetes, and breast cancer survivors. We hope this Special Issue sparks additional interest in these important topics and others that are critical to supporting workers with chronic health conditions in organizations.

Keywords Chronic health conditions \cdot Chronic illness \cdot Mental illness \cdot Chronic disease \cdot Work design \cdot Supervisor support



The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.

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Chronic health conditions—long-lasting physical and mental illnesses or conditions that require ongoing management and/or lead to limited functioning (CDC, 2022a)—affect a large and growing percentage of the population in the United States and globally. 60% of adults in the United States experience at least one chronic health condition and 40% are affected by two or more (CDC, 2022a). Examples of common chronic health conditions in the United States include heart disease, cancer, diabetes, arthritis, kidney disease, and mood disorders (Buttorff et al., 2017).

Though commonly associated with older age, chronic health conditions are increasingly affecting younger individuals. For example, Watson (2022) found that 53.8% of adults aged 18–34 in the United States experience at least one chronic health condition. Another study found that one third of individuals aged 34-36 reported that they are affected by chronic health conditions that are expected to reduce their life expectancy and well-being, including major depression, substance use disorders, hypertension, Attention Deficit/Hyperactivity Disorder (AD/HD), psychotic conditions, Crohn's disease or ulcerative colitis, high cholesterol, and type 2 diabetes (Blue Cross Blue Shield, 2019). Coupled with the fact that many chronic health conditions are non-apparent (i.e., either concealable to others with effort or invisible to others), organizations may assume that a sizeable proportion of their workforces may be living with chronic health conditions, even if those workers are relatively young and/or have not disclosed their health conditions. Further, leaders and managers in organizations may presume that they are most likely supervising many workers with chronic health conditions, whether they are aware of those health conditions or not. This underscores the criticality of researching challenges related to working with chronic health conditions and investing in viable solutions to help promote the work ability, well-being, and quality of working life of affected workers (McGonagle et al., 2014b).

Challenges Associated with Chronic Health Conditions in Workers and Implications for Employers

Chronic health conditions often present challenges to affected individuals, leading to declines in quality of life, financial adversities, and diminished work ability (Al Qadire et al., 2023; McGonagle et al., 2020). Workers with chronic health conditions who experience stigma, discrimination at work, and poor supervisor and employer support tend to have greater difficulty managing their diseases within the context of their work roles, minimizing their work ability and overall well-being (Fragoso & McGonagle, 2018; McGonagle et al., 2016, 2020, 2022). For example, McGonagle et al. (2014a) found that 50% of respondents to an online, anonymous survey reported some form of work discrimination due to their chronic health conditions. When chronic health conditions intersect with other stigmatized identities in the workplace, these challenges may be worsened. For example, Jason et al. (2024) studied Black and Hispanic workers with chronic health conditions during the COVID-19 pandemic and found that many reported worsening mental illness and challenged social relationships at work.



Chronic health conditions also present challenges to organizations, many of which pay higher insurance premiums associated with increased health care costs and might incur indirect costs from reduced productivity, including short- and long-term absenteeism and presenteeism (CDC, 2022b; Jinnett et al., 2017; Milken Institute, 2018). Beyond the economic implications, organizations may struggle to retain talent in the face of increasing chronic health condition prevalence, including long-COVID. Further, it is important to remember that all workers have the fundamental right to occupational health and safety (International Labour Organization, 2022). In addition to this core principle, higher attrition rates and the cost of hiring and training new employees warrant strategic planning and support of employees with chronic conditions.

Workplace Supports for Workers with Chronic Health Conditions

Organizations often provide workplace wellness programs focused on disease prevention and/or mitigation of further harm from existing diseases. Examples of these programs include smoking cessation programs, gym membership reimbursement programs, stress management programs, and health risk screenings (KFF, 2022). Indeed, 80% of organizations offering health benefits in the United States offer some form of wellness program (KFF, 2022). While touted to reduce healthcare costs, health care usage, and absenteeism, evidence for the effectiveness of wellness programs is mixed. Surveyed employers believed there have been very of moderately effective reductions in health care costs (32%), health care utilization (31%), and employee absenteeism (22%), while 49% felt the programs were very or moderately effective in improving employee health and well-being (KFF, 2022). Yet, one randomized controlled trial of the wellness program at BJ's Wholesale Club (a large membershiponly warehouse store chain in the Eastern U.S. with 215 stores) found no effects of the program on direct healthcare costs (total medical spending, outpatient visits, hospitalizations, emergency department visits, total pharmaceutical spending, and specific medication use), health metrics, or job performance (Song & Baicker, 2021). Another randomized controlled trial of the wellness program at the University of Illinois at Urbana-Champaign found no evidence for improvements to healthcare costs, health behaviors, or employee productivity (Jones et al., 2019). It is likely that wellness programs alone, which primarily focus on changing individuals' behaviors, thus placing the onus on employees to make changes without employers taking actions, are insufficient for meeting the needs of most workers with chronic health conditions. Thus, more systemic supports are needed.

Return-to-work (RTW) programs are other common organizationally sponsored programs that assist workers with chronic health conditions. RTW programs help workers experiencing disability from work-related or non-work-related conditions to recover and get back into the workforce, thereby reducing the chance of permanent disability and optimizing economic and social opportunities. These programs typically include accommodations, transitional work, a case coordinator, and medical management (Costa-Black, 2013). Research findings on the effectiveness of RTW programs are also mixed. In general, some evidence exists for small effects of RTW programs on returning to work, work absences, work function, and pain levels; how-



ever, evidence for lasting effects of these programs in terms of staying at work and preventing future absences is lacking (Nichols et al., 2020). Notably, RTW programs are reactive in nature—used when an employee's work ability has declined so significantly that they must be out of work. More proactive strategies to support workers with chronic health conditions are needed (Pransky et al., 2016).

Though less common, there are some promising individual-focused evidence-based interventions for workers with chronic health conditions to promote well-being and work ability. These include, for example, chronic disease self-management programs adapted to the workplace (e.g., the Live Healthy, Work Healthy program; Haynes et al., 2022); a worksite group self-management program for workers with chronic health conditions (i.e., the Manage at Work program; Shaw et al., 2022); and a virtual coaching program to improve work ability and alleviate burnout in workers with chronic health conditions (Beatty & McGonagle, 2016; McGonagle et al., 2014b).

In sum, workplace programs to support workers with chronic health conditions mainly include individual-focused wellness programs and RTW programs, with some individual self-management and coaching programs. Often missing from these supports are those related to worker-centered work design (i.e., content and organization of work tasks, activities, relationships, and responsibilities; Parker, 2014) and management and supervision. Evidence-based, proactive, systemic measures, including efforts to design work and manage workers in ways that are supportive of the needs of workers with chronic health conditions, are sorely needed. As stated in a recent Lancet commentary (Swenor, 2021, p. e359),

"While efforts to prevent and treat diseases and conditions will always be important and necessary, this myopic focus perpetuates stigma, ableism, and inequities for the disability community. Research aimed at maximising the health and inclusion of people with disabilities is crucial." - Dr. Bonnielin Swenor, Johns Hopkins University School of Medicine, School of Public Health, and Disability Health Research Center.

The Focus of this Special Issue

The focus of this Special Issue is on workplace factors that affect workers with chronic health conditions, including work stressors, worker-centered work design, supervisor support, and supportive programs. Work organization and work design can dramatically shape workers' experiences with existing chronic health conditions and their ability to manage chronic diseases and continue productive working as long as desired while maintaining quality of working life.

We have assembled a set of interdisciplinary contributions that examine work design, work supervision, psychosocial factors, and programs critical to workers with chronic health conditions. The papers in this Special Issue focus on populations of workers with mental health conditions, workers with diabetes, workers who are breast cancer survivors, and workers with various types of other chronic health conditions. Together, the papers examine important concepts including supervisor sup-



port, psychosocial safety climate (shared perceptions of work policies, practices, and procedures that are meant to protect worker psychological health and safety), fairness, sense of community, job control, leeway to manage work and health (freedom available to workers to self-regulate work activities while self-managing day-to-day symptom fluctuations), and supportive programs for managing chronic disease. They also examine important stressors that are common for workers with chronic health conditions, including work-health conflict, devaluation, anticipated stigma, and job insecurity.

Special Issue Contributions

Our first paper, by Dr. Leslie Hammer and colleagues, A Framework for Protecting and Promoting Employee Mental Health through Supervisor Supportive Behaviors, reviews the role of supervisors and provides a theoretically grounded framework for understanding workplace-supportive strategies as approaches that prevent risk factors and promote protective factors related to employee mental health (Hammer et al., 2024). Specifically, the authors discuss supervisor behaviors that may protect and promote the mental health of workers. Understanding how supervisors can better support workers' mental health is critical as workers report experiencing unprecedented levels of stress and burnout, and as mental illnesses such as depression and anxiety disorders are increasingly prevalent among workers (e.g., U.S. Office of the Surgeon General, 2022).

Our second paper, by Michelle DeOrsey and Dr. Mark Agars, Supporting Workers with Chronic Illness: The Role of Psychosocial Safety Climate, examines the importance of organizational psychosocial safety climate for workers with chronic health conditions (Agars & DeOrsey, 2024). The authors find negative associations between psychosocial safety climate and anticipated stigma, turnover intentions, emotional exhaustion, and depression, anxiety, and stress, and positive links between psychosocial safety climate and work engagement, across a range of chronic health conditions. Notably, the authors' findings reinforce the observation that psychosocial safety climate is heavily informed by management commitment and priorities (Hall et al., 2010), further underscoring the importance of implementing the aforementioned supportive supervisor behaviors espoused by Hammer et al. (2024).

Our third paper, by Dr. William Shaw and colleagues, Organizational Support Factors Associated with Fatigue and Turnover Intention among Workers with Chronic Health Conditions, examines four organizational support factors for workers with chronic health conditions: heath-related leeway, perceived organizational fairness, sense of community at work, and job control (Shaw et al., 2024). As noted, health-related leeway refers to the freedom afforded to workers to self-regulate their work behaviors while managing symptom fluctuations (Shaw et al., 2023). Using a sample of workers with various chronic health conditions who participated in a randomized controlled trial of the Manage at Work intervention, the authors found that higher levels of perceived fairness uniquely contribute to lower levels of turnover intentions and higher levels of leeway uniquely contribute to higher levels of fatigue and turnover intentions. Interestingly, the authors found greater benefits of leeway on turnover intentions for younger workers as compared to older workers. The results point



to the importance of maintaining fairness in organizational practices and providing health-related leeway to support workers with chronic health conditions.

Our fourth paper, by Dr. Alicia Dugan and colleagues, Work-Health Conflict among Breast Cancer Survivors: Associations with Cancer Self-Management, Quality of Life, and Anticipated Turnover, examines work-health conflict, cancer self-management behaviors, health-related quality of life, and anticipated turnover for health reasons in a sample of breast cancer survivors (Dugan et al., 2024). The authors found that work-health conflict had direct negative effects on health-related quality of life and anticipated turnover due to health reasons, as well as indirect effects on both outcomes through a negative relationship with cancer self-management behaviors. These findings add to a small, but growing body of literature on inter-role conflict related to health management and work role fulfillment and further support the importance of mitigating work-health conflict for workers with chronic health conditions.

Our fifth paper, by Stephanie Penpek and colleagues, Experiences of Workers with Chronic Health Conditions During the COVID-19 Pandemic: An Examination of Demands and Resources, examines how the COVID-19 pandemic affected these workers' perceptions of well-being and burnout (Penpek et al., 2024). In a sample of working adults with various chronic physical health conditions, the authors found that around half of participants were satisfied with their employers' response to the pandemic, yet many desired additional accommodations, such as flexible work arrangements, paid time off, and policies to help manage COVID-19 exposure risk. In addition, the authors found that job insecurity predicted well-being and that perceptions of devaluation contributed to burnout when controlling for other psychosocial workplace factors.

Our sixth paper, by Sarah Levine and colleagues, *Employer Engagement Strategies to Promote and Add Evidence-Based Chronic Disease Prevention and Management Programs as a Covered Benefit*, presents findings of an employer program focused on engaging employers to provide coverage of benefits and to promote chronic disease prevention and management programs in Colorado workplaces (Levine et al., 2024). The authors demonstrate the importance of employer engagement to support and maintain chronic disease prevention and management efforts and provide practical tips for engaging employers to provide such programs as benefits to their employees. The focal program in this article is type 2 diabetes prevention, which is important due to high and rising numbers of individuals being diagnosed with type 2 diabetes, along with the potentially devastating effects of this disease (CDC, 2022b).

Conclusion

It is important to move beyond a sole focus on prevention and rehabilitation of chronic disease in the workplace, to full integration and support of those with chronic health issues in organizations. In much the same way that workplaces may desire to protect even the most at-risk workers from occupational hazards, employers may also desire to promote the health and well-being of those experiencing chronic health conditions. Emerging exposures (e.g., environmental exposures), increasing rates of obesity and diabetes, pandemics (e.g., COVID-19) and epidemics (e.g., opioid use



disorder) further underscore the urgency of this need as they impinge on workers' health, well-being, and quality of life, and in turn, organizations' business performance, and society's collective well-being.

Work design and positive supervisor and organizational practices are critical elements to attend to in this shift from reactive, individual-focused efforts to more systemic, organization-focused efforts. Taken together, the papers in this Special Issue point to the importance of effective supervisor support, a positive psychosocial safety climate, fairness in organizational practices, and leeway for workers to attend to health symptoms while working—alongside practices to mitigate work-health conflict, job insecurity, and devaluation to support workers with chronic health conditions. We hope this Special Issue sparks additional interest in these important topics and others that are critical to supporting workers with chronic health conditions in organizations.

Declarations

Conflict of Interests We have no known conflicts of interest to disclose.

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