The Impact of Excessive Workload on Job Performance of Healthcare Workers during Pandemic: A Conceptual Mediation - Moderation Model

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Abstract:
The paper conceptualises a mediation-moderation model of burnout, coping styles and personality traits to explain the impact of excessive workload on job performance of healthcare workers. The authors used an extensive literature review to conceptualise the above model. The model emerged with a theoretical causal relationship of the impact of excessive workload on job performance and how burnout, coping style and personality intervene in this relationship. It concluded with the propositions of a conceptualised moderated mediation. The paper adds value in terms of policy implications that have been clearly articulated, keeping in mind the relevance of the work in the context of pandemics.

Keywords: Excessive Workload; Job Performance; Burnout; Coping Styles; Personality Traits

1. Introduction

The COVID-19 outbreak has brought a unique set of obstacles to healthcare personnel. In addition to the numerous physical threats posed by the virus, healthcare professionals have also faced unprecedented levels of stress and job burnout. Job burnout is an emotionally depleting state of tiredness produced by prolonged exposure to difficult work conditions such as high demands and insufficient resources. Healthcare professionals are at particularly high risk of developing job burnout due to the heavy workload, long hours and emotional labour involved in caring for patients during this difficult time. This paper discusses the impact of job burnout and strategies organisations can use to prevent or manage it when it occurs.

The multiple extreme requirements of the healthcare system to cope with the prevalent changes and treatment demands for the elevating numbers of COVID-19 results in the work overload and associated stress which will, in turn, leads to the improper delivery of patient care and affects the quality of work-life of as well as the job performance of the healthcare workers. It is necessary to implement a remedial strategy to ensure the work-life quality of the medical care providers during the period of crisis.

The Stress-Strain-Outcome model of job stress is the bedrock of this study to conceptualize how an excessive workload affects healthcare personnel's ability to do their jobs. The paper proposes that over workload is a job stressor that leads to burnout as strain, with the outcome impact on job performance. Additionally, the authors propose that coping styles and personality traits of healthcare workers might moderate the relationship between burnout and work performance. Through a mediation moderation model of burnout, coping styles, and personality traits, the current study conceptualizes the impact of over workload on job performance among healthcare workers.

2. Research Focus

Job burnout has been linked to a decrease in job performance due to fatigue, stress, and other mental health issues that can arise from prolonged exposure to challenging situations. Maslach, Schauefeli, & Leiter (2001) identified six crucial aspects of burnout, and these are: excessive workload, recognized lack of control, mismatching of values, inadequate remuneration, unjust treatment, and negative perceptions of the workplace environment. Healthcare professionals have experienced an increase in workloads as well as more intense working conditions since the onset of the pandemic. This has led to higher levels of burnout, which could potentially lead to reduced job performance among those affected by it. In addition, many healthcare workers are dealing with anxiety and depression related to their work environment during this time period. These feelings can further contribute to decreased productivity if not addressed properly.

Healthcare is an extremely stressful profession. Clinical stress such as dying is both an expected and perceived cause of anxiety for healthcare professionals (Evans and Kelly, 2004), which is uncommon for other professions. Night work, shift work and long

working hours are very common in medical professions, which can affect the physical and mental well-being of healthcare workers. A study by Beso et al., (2005) revealed that work overload has an influence on employee morale, physical well-being, and key performance indicators, including clinical mistakes. With the rising cost of living, healthcare professionals also experience financial stress (Evans and Kelly, 2004). Additionally, the phenomenon of increased workload and stress is evident among medical workers since the outbreak of COVID-19.
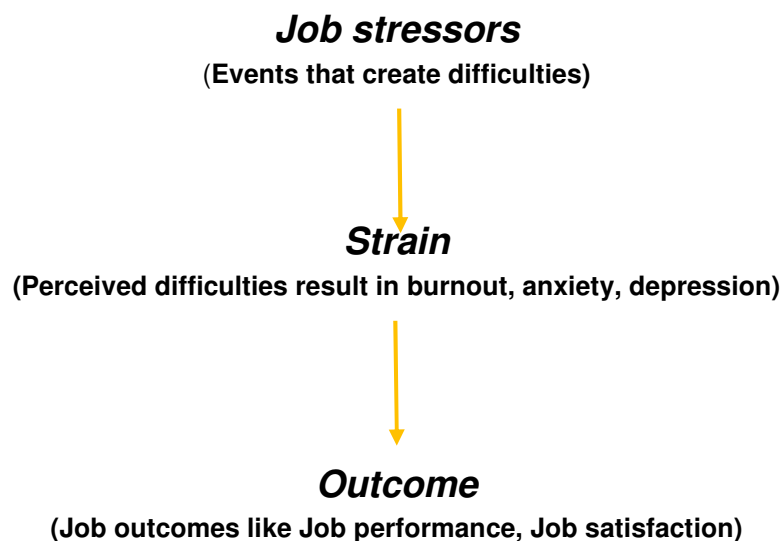
The recent COVID-19 pandemic had a psychological impact on healthcare workers, who were unprepared to deal with such a powerful and unknown virus. They were faced with situations of extreme distress, resulting in sleep deprivation, vicarious traumatisation, post-traumatic stress disorder, and vulnerability to viral infections (Pappa et al., 2022). Shoja et al. (2020) reported that healthcare professionals who had exposure to treating COVID-19 patients reported experiencing being overworked, compared to employees who had not attended at their healthcare organization.

3. Theoretical Framework & Literature Review

3.1. Stress-Strain Outcome (SSO) Model

The SSO model developed by Koeske and Koeske (1993) relates the association of the outcome and stressors in work and through the conceptualization, the strain factor is considered as a mediating role. The perception of individuals about the environmental impulse as difficult is referred to as a work stressor under this model. Excessive workload, inadequate organizational support, and role-related conflicts are the usual stressors associated with the job. Burnout is a usually diagnosed strain in previous studies (Koeske & Koeske, 1993; Tetrick et al. 2000). This is aligned with the SSO model which says distinct perceived work-related issues mediate throughstress, burnout, anxiety, and depression, to the outcome. The SSO model for burnout is called the "stress-strain-outcome model" in which the causal relationship between the essential variables was arranged as shown in Fig. 1.

Figure 1: Stress-Strain Outcome Model (Koeske & Koeske, 1993)

Job stressors
(**Events that create difficulties**)

Strain
(**Perceived difficulties result in burnout, anxiety, depression**)

Outcome
(**Job outcomes like Job performance, Job satisfaction**)

The sole job stressor included in this model, instead of broad workplace stressors, is excessive workload, and burnout is presented as an intervening variable that mediates stress and outcome. This model, which is based on the mediation and moderation of burnout, coping style, and personality traits, is conceptualized around the impact of excessive workload on job performance. Based on the work stress theory, job demands are correlated to the stress and burnout that emerged in workers (Dermouti, Bakker, Nachreiner, & Schaufeli, 2001).

From the point of view of the Person-Environment theory of stress, stressors are not the outcomes from an individual or the environmental perspective, besides it results from the correct match between the person and environment. If there is an imbalance between the environment and person match, the individual will expose to various stressors like work overload, ambiguity in the role, and conflicts between the roles (Spielberger et al. 2001). This stressor perspective arises because the worker views that the skills they have will not help them to satisfy the completion of tasks (Cooper et al. 2001).

3.2. Understanding the Variables

3.2.1. Predictor

Excessive Workload: An excessive workload occurs when an employee is required to go beyond the routine range or level of duties for his or her position. Workplace stress not only affects healthcare professionals' physical and psychological well-being but also affects their job performance, resulting negative impact to both their personal life and their working organisation. Healthcare workers who are less satisfied with their works also have a higher level of work stress (He et al., 2023), absenteeism (Davey et al., 2009), and greater intention to leave the profession (Jo et al., 2023). Absenteeism among healthcare workers contributes to disruptions in patient care, low staff morale and is costly to the healthcare system. Furthermore, the quality and outcomes of healthcare are also negatively affected by high workload and job stress (van den Hombergh et al., 2009).

3.2.2. Outcome Variable

As stated by Koeske & Koeske (1993), an outcome is the entirely behavioural, and so does the influence of emotional behaviour on job outcomes or job performance as a consequence of persistent exposure to stressors and strain. Personal performance, organisational efficiency and patient care are adversely affected by work-related stress (Hawksley, 2007).

Earlier studies identified a number of factors that impact job performance of healthcare workers, which includes intrapersonal factors such as social recognition (Ruiz-Fernández et al., 2020) and organisational factors such as healthcare management practices (Adhikari and Sapkota, 2019). Organisational support, such as adequate access to personal protective equipment's supplies, may have helped to

alleviate the psychological problems of healthcare workers as workload and workplace stressors increase during the global pandemic (Jo et al., 2023).

Compassion satisfaction is work-related fulfilment associated with providing patient care as well as feeling supported and productive in professional endeavours. During the early stage COVID-19 health crisis in Spain, healthcare professionals had a high level of fatigue and burnout; however, there was a notable increased level of compassion satisfaction due to their perceived social recognition (Ruiz-Fernández et al., 2020). Interestingly, Kase et al. (2022) found that healthcare workers who have high compassion satisfaction and low burnout scores were significantly associated with the sentiment "My institution values my contribution to the COVID-19 crisis". To sum up, intrapersonal and organisational factors affect job performance and satisfaction of healthcare personnel.

3.2.3. Mediator

Burnout: Burnout can be defined as a chronic psychological syndrome happening due to continuous exposure to job stressors (Leiter and Maslach, 2000). Burnout is the consequence of prolonged exposure to the job stressor or work overload. Empathic communication is essential for high quality humanistic care. Burned-out healthcare professionals are likely to express cynicism and pessimism about treatment, which patients and their families may perceive as cold and rude (Seo et al., 2020). Studies show that burnout and job stress increased absenteeism (Davey et al., 2009), intention to leave (Jo et al., 2023), occupational injury (Bagheri Hosseinabadi et al., 2019), and loss of worker productivity (Stimpfel et al., 2015). This problem is exacerbated globally in situations where medical needs arise rapidly, such as during the COVID-19 pandemic. From the studies that have focused on organisational responses to nurse distress, it is clear that interventions such as helping nurses to cope with stress and grief and providing self-care resources can help healthcare workers to maintain job satisfaction and reduce fatigue and burnout (Davey et al., 2009; He et al.,2023; Jo et al., 2023; Kase et al., 2020).

3.2.4. Moderators

Coping style: Coping style is defined as one of the mechanisms for controlling a situation that is recognized as beyond one's resources (Lazarus and Folkman 1984). The stress level can be decreased significantly if the workers understand how to handle those stressors. There have been many different types of coping mechanisms, such as accepting the situation: resilience, disassociating, pursuing communal assistance, acknowledging personal accountability, and exclusion. The coping strategies that individuals use in response to stressful events are central to the interaction between individuals and their environment. However, there was a notable lack of workplace stress management strategies in the healthcare industry.

According to a study by Tully (2004) on student nurses' mental program learning, the use of ineffective coping mechanisms was found to be significantly associated with higher levels of emotional distress among the students. Similarly, Evans and Kelly (2004) researched the stress-coping capacities of student nurses in an Irish health

centre, and they found that students tended to use emotion-focused coping strategies when they were stressed. The determination to carry on despite the stress helps them to complete their studies.

Personality Traits: Personality traits can be considered a personal resource to cope with a stressful situation (Hobfoll 1989). Personality mainly explains why, given the same stressful working conditions, employees differ in how burnt out they become. The concept of resilience has emerged in recent years as a personality trait that protects against burnout. Resilience in healthcare workers is known to be an important factor in increasing job satisfaction and avoiding burnout (Jo et al., 2023).

In a study of understanding the relationship between fear of COVID-19 and the Big Five personality traits, Odachi et al. (2022) found associations between Japanese nurses' mental health problems and neuroticism in the Big Five personality traits. Neuroticism is thought to increase anxiety about COVID-19 because of the tendency to experience negative emotions such as anxiety, anger and depression, and weak coping skills. Similarly, Eroglu et al. (2023) observed that neuroticism has a negative impact on psychological resilience and fear of COVID-19 among university students, whereas conscientiousness and openness to experience have a positive direct impact on psychological resilience. Susceptibility to burnout is partly determined by personality traits. Working in complex conditions can bring out the best in some people, while others struggle with it. The personality trait is considered as a moderating variable in this paper because it may affect the relationship between burnout and job performance.

3.3. Development of Propositions

Healthcare is both physically and mentally demanding. Studies showed that healthcare workers' heavy workload may increase absenteeism (Davey et al., 2009), occupational injuries (Bagheri Hosseinabadi et al., 2019), medical errors (Beso et al., 2005) and burnout (Seo et al., 2020). Healthcare professionals are exposed to a variety of hazards that can jeopardise their health and affect their ability to provide quality patient care. Some healthcare professionals were working in prolonged or cramped positions which often lead to musculoskeletal pain (Akodu and Ashalejo, 2019; WHO, 2010). Previous research suggests that workload and working shift may be at increased risk of certain occupational injuries such as needle stick injury and sprains/strains injury (Bagheri Hosseinabadi et al., 2019; Stimpfel et al., 2015). Moreover, healthcare personnel with high levels of compassion fatigue are more likely to make errors, provide poor quality care and have a greater intention to leave their job (Jo et al., 2023). Healthcare practitioners treating COVID-19 victims are more likely to suffer from sadness, stress, sleeplessness, and exhaustion (Pappa et al., 2022). Apathy towards the needs and suffering of patients can undermine the delivery of quality healthcare (Seo et al., 2020). These arguments bring the first proposition as

Proposition 1: The healthcare workers who experience over workload will have lower levels of Job Performance.

Work overload is not just bad for mental health but also physical health. Excessive workload and the subsequent burnout can have important implications for both the wellbeing of staff and the capacity and efficiency of health systems, given the known links between burnout and long-term physical and psychological consequences such as reduced productivity (Stimpfel et al., 2015), increased intention to leave the medical profession (Jo et al., 2023; Kase et al., 2022), sick leave and absenteeism (Davey et al., 2009), medical errors (Beso et al., 2005), and occupational injuries (Akodu and Ashalejo, 2019; Bagheri Hosseinabadi et al., 2019; Stimpfel et al., 2015). The resulting negative impact on employee wellbeing and a deteriorating team atmosphere contribute to a decline in both organisational and individual performance.

The word 'burnout' was first used in the United States in the 1970s, mostly in healthcare services (Maslach, Shaufeli, & Leiter, 2001). Burnout may thus be traced back to the caring and service industries. The association between givers and beneficiaries, as well as aiding those in distress, were at the heart of such employment. Burnout was a poorly defined notion initially, which meant there was really no formal explanation for it. Nonetheless, there was a general agreement on three key aspects of burnout syndrome. Increased sentiments of exhaustion, cynicism, and disengagement from the profession, as well as feelings of lack of effectiveness, are among these aspects. Professionals who are experiencing greater emotions of exhaustion are more likely to disengage on a psychological and physiological dimension in order to cope with job overload. As a result, the professionals disengage from their work by adopting a cynical attitude. Inefficacy was the next element of burnout. This pertains to a diminished feeling of professional achievement. Unlike the other two aspects of burnout, this aspect is triggered by a scarcity of productive resources, whereas the other two are triggered by work stress and interpersonal disagreement (Maslach et al., 2001).

Thus, it is proposed here that,

Proposition 2: Burnout will mediate the association between the over workload and performance of the job among healthcare workers.

The coping styles are considered a psychological intervening factor in the association between the stressor and strain, which performs a significant part in determining the various consequences of the stressors (Tidd & Friedman, 2002; Lowe & Bennett, 2003). The productive coping styles will result in the reduction of the stress level. The transaction model of stress (Lazarus and Folkman 1984) discusses the relevance of coping in the process of stress and is considered an essential factor that supports reducing the various impacts of stressors on the strain.

There are two main types of coping styles i.e. emotion focussed and problem focussed are determined based on previous studies (Lazarus and Folkman 1984). Nurses who use avoidance tactics or behaviours like evasion, suppression, or accusing others are vulnerable to burnout, whereas those who use active coping styles like positive evaluation and factual examination of stressful situations are the least sensitive to

burnout (Duquette et al., 1995). Evans and Kelly (2004) observed that nursing students tend to use emotion focused coping strategies when dealing with stress. This is consistent with the study of Ceslowitz (1989) who found that nurses with high degrees of burnout adopted the coping methods of avoidance, self-regulation, and confrontation. Scholarly works show that avoidance coping was the strongest predictor of adverse well-being (Gibbons et al., 2010), while avoidance and confrontational coping were significant predictors of burnout (Lauzon, 1991). Similarly, Teague (1992) observed that nurses who used emotion-oriented coping styles had the most burnout. The purposeful modulation of feelings is a hallmark of emotion-focused coping. Acknowledging responsibility, constructive reappraisal, agreement, behavioral denial or diversion are all common examples of emotion focused coping strategies.

Problem-focused coping, on the other hand, aims to deal with unpleasant circumstances or situations. This aims to persuade a stressed individual to modify his or her behavior or to devise and create appropriate strategies to manage the stressful problem. Active coping, explicit issue resolution, and strategizing are some of the problem-focused tactics (Folkman and Lazarus, 1988). Li et al. (2017) concluded that positive coping strategies moderated between patient care and job performance, while negative coping strategies moderated between workload and job performance. Li et al. (2017) also observed that the use of positive coping strategies decreased and negative coping strategies increased as work stress increased. Based on the literature review, it is clear that coping style impacts the relationship between burnout and job performance, and thus this leads to our third proposition:

Proposition 3: The coping style will moderate the association between burnout and the performance of the job.

Personality traits can be considered as a moderator between burnout and job outcome. A substantial body of evidence indicates that personality is a significant predictor of stress evaluation (David & Suls 1999; Headey & Wearing 1989; Schneider 2004; Vollrath et al. 2000). People who are prone to neuroticism, for instance, interpret stressful events as dangerous. Scientists determined that personality influences a person's choice of coping method (Eaton & Bradley 2008; McCrae & Costa 1986; Watson & Hubbard 1996). Deary et al, (1996) acknowledged that doctors with neuroticism or adverse affectivity experience more stress and burnout.

McManus et al (2004) found physicians who are the utmost stressed to have an elevated degree of neuroticism, while those who express the most emotional weariness had elevated amounts of neuroticism while also being greater introverted. They contend that personality is the root source of strain as well as burnout. Personality influences the stress response, the awareness of the threat, and even the accompanying psychological as well as bodily responses (Chung and Harding, 2009). Gustafsson et al. (2009) compared the involvement of personality traits of a group of medically-assessed burnout healthcare workers with a non-burn-out group, results showed that the main indicators of the burnout group were 'openness to changes' and

'anxiety' whereas the key indicators of the non-burnout group include 'emotional stability', 'liveliness', 'privateness' (i.e. forthright or discreet), and 'tension'.

Deary et al. (1996) discovered that within Scottish doctors, conscientiousness was adversely connected with emotional weariness and decreased individual achievement but not with depersonalization. Persons with strong conscientiousness prefer to be responsible, self-disciplined, organized, motivated, industrious, diligent, task-efficient, as well as goal-oriented. It is clear from the literature that variables such as coping strategies and personal traits influence workplace stress outcomes. Thus, we can propose that:

Proposition 4: The personality traits will moderate the association between burnout and the performance in the health worker's job

Figure 2: Proposed Model of the impact of workload mediates through burnout on job performance
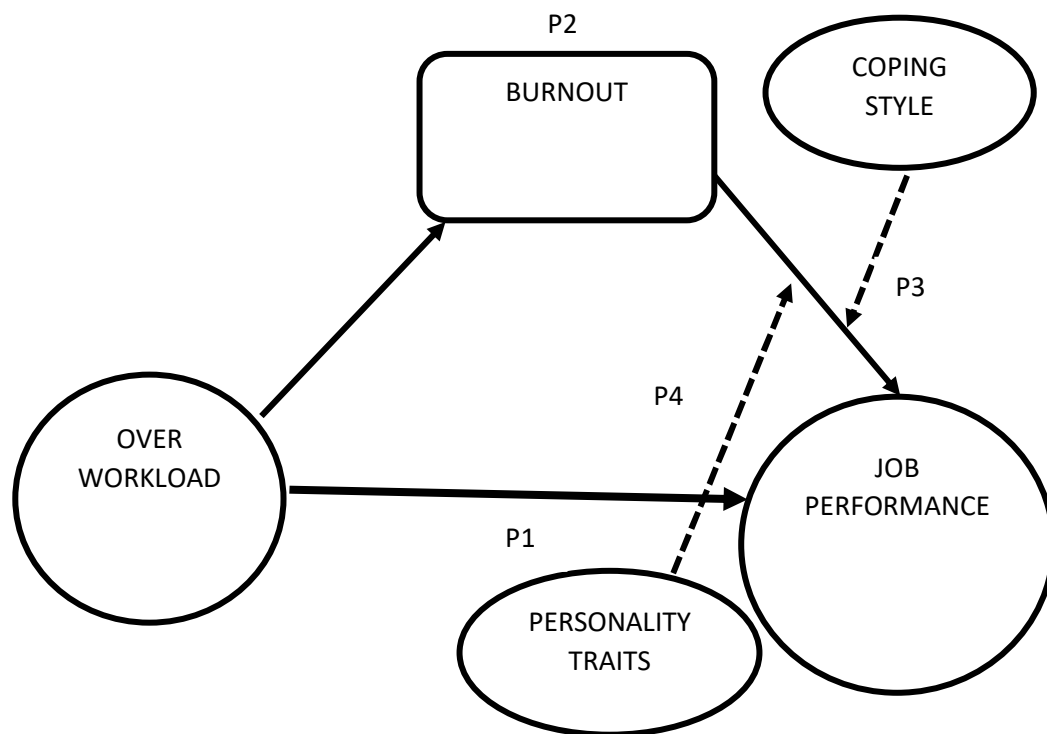
4. Scope and Implication

4.1. Managerial Level

Prevention is likely to be the solution to most of the problems. This conceptual model (Fig. 2) is intended to help healthcare professional to identify potential problems and make appropriate adjustments. As part of the orientation training, newly recruited

healthcare workers should be aware of the inherent work overload of the healthcare job and supports given by the healthcare organisations. This will enable them to cope with conflicting situations and prepare the workers for a better understanding of the working environment and job requirements.

The organisations can use a personality test during the selection process stage, and this will help the organisation to recruit the best employees who are more adaptable to the inherent work overload of the healthcare profession and with more result-oriented desired behaviours in anticipation of specific personality traits. Also, by understanding the types of individual coping strategies for burnout situations, appropriate interventions can be adopted to enhance the practical coping style of individuals. By implementing effective intervention strategies to address burnout caused by work overload, the organisation can retain highly productive employees and ensure the quality of healthcare services.

In addition, managers should create an environment where health workers feel comfortable expressing their feelings and concerns about burnout. This could include holding regular meetings with staff to provide a platform for open dialogue, creating anonymous surveys or feedback forms, or providing access to mental health resources.

This model focuses only one job stressor and that is work overload in the healthcare sector. Other job stressors related to healthcare sector are excluded in this model. Mainly, this is because it is a preliminary conceptual model which requires empirical data collection and analysis to establish the significance related to variables. It is strongly suggested to conduct further studies which empirically explore the associations between various healthcare job stressors, associated burnout, coping style, and personality traits of employees with various healthcare job outcomes.

4.2. Policy level

Efforts to build a robust and sustainable healthcare system must be human-centred. This involves making the right decisions about staff requirements and creating an environment that supports staff. Firstly, access to mental health support should be made available to healthcare professionals who are struggling with job burnout due to the physical, emotional, and psychological stress caused by the pandemic. Secondly, flexible work arrangements should be made available so that healthcare workers can have greater control over their schedules thereby reducing stress levels and helping them better manage their time and energy levels. Thirdly, maintain adequate staffing capacity and capability by hiring the right staff with the right skills at the right time.

The model also tries to identify the influence of coping styles and personality traits of the employees to adjust to the burnout arising from work overload and its effects on performance. To ensure a right person-organisation fit, healthcare organisations could assess an individual's personality traits and coping styles by using psychological assessment tools to provide an understanding of how they may respond to different situations, what motivates them, their communication style and any potential areas of conflict. Following to that, the organisations could compare the results of the

assessment with the organisation's values, culture and work environment to identify any potential areas of misalignment between the two. Hiring managers should also discuss with prospective employees regarding their job expectations to make sure a right person-organisation fit. Additionally, organisations should consider whether there are ways to bridge or overcome these differences through training and development opportunities for individuals or organizational changes that could be made to better support those who fit poorly within its hospital culture (Montgomery et al., 2011).

5. Conclusion

The COVID-19 pandemic has caused unprecedented levels of stress and burnout among healthcare workers. Working in healthcare is full of challenges. With the additional workload, long hours and lack of resources, it is not surprising that many healthcare professionals have experienced job burnout post-COVID-19. While there is no simple solution to reducing the impact of job burnout on the performance of post-COVID-19 healthcare professionals, organisations should strive to create a supportive environment that prioritises employee well-being while maintaining high expectations for quality care. In addition, providing resources such as counselling services or educational opportunities can help reduce the impact of burnout on these individuals' overall job performance. It is therefore vital for management to take appropriate initiatives to prevent and mitigate burnout.

Effective policies can have a significant impact on the mental health of healthcare workers by helping to reduce their stress levels, improve their job satisfaction and create an environment in which they feel supported. This can be achieved through the adoption of a person-centred health care model and a diverse, sustainable mix of primary health care and supported by effective referral and linkages through all levels of across all levels of care to the social services workforce (WHO, 2016). Policies such as flexible working hours, adequate staffing levels, access to mental health services, support for career development and recognition of good performance can help to ensure that healthcare workers can focus on providing quality patient care while also looking after their own wellbeing. To avoid burnout and errors, it is necessary for management to implement a policy for managing workload and guarantee acceptable hours of work as well as implement adequate rest intervals and breaks (International Labour Organization, 2019). Such policies can also help to reduce burnout among health workers and prevent long-term psychological distress.

This paper contributes to the literature by offering a framework that integrates work overload, burnout, and job performance in healthcare setting. The emphasis is put on examining performance-level outcomes of work overload through burnout. Specifically, the authors discussed how burnout mediates the relationship between work overload in healthcare workers and job performance. The paper also discusses the moderating role of coping style and personality traits on the work overload-burnout-performance relationship. Because coping styles and personality traits can directly or indirectly influence staff burnout, they may make staff more vulnerable or resilient to poor psychological well-being. Future research could use the proposed framework in this paper and further venture towards examining the manifestation of burnout, personality traits, and coping styles on over-workload and job performance.

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