

FACTORS ASSOCIATED WITH WORK PERFORMANCE AND MENTAL HEALTH OF HEALTHCARE WORKERS DURING PANDEMICS IN ASIA : A SYSTEMATIC REVIEW

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Abstract

COVID-19 is highly contagious and the transmission dynamics are associated with intercontinental spread. The pandemic's short-term and long-term impact on healthcare worker's mental health and well-being remains largely unknown. This systematic review used preferred reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The articles were searched from PubMed, the reviewers had screened 729 abstracts, 372 full-text publications, and ultimately included 11 systematic reviews. The review found ten factors associated with the work performance and mental health of healthcare workers in Asia, including experiencing feelings of anxiety, having inadequate support, depression, experiencing occupational stress, loneliness, lack of workplace preparedness, financial concerns associated with changes in income and daily living, fear of transmission, burnout/fatigue and sleep disturbance. This systematic review can be used as input for governments and employers as a reference to develop strategies to support healthcare workers' mental health, well-being and work productivity.

Keywords: COVID-19, healthcare workers, work performance, mental health

Introduction

The COVID-19 pandemic is a global healthcare emergency and economic catastrophe on a scale not seen in more than a century. COVID-19 is highly contagious and the transmission dynamics are associated with intercontinental spread (Thatrimontrichai et al., 2021). The COVID-19 was declared a global pandemic on 11 March 2020 by the World Health Organization (Nowrouzi-Kia et al., 2022). The COVID-19 spread caused, in a few weeks, excessive hospital overload, a high shortage of healthcare resources, and an additional workload for professionals. Hospitals had to rapidly reconfigure clinical spaces and restructure work teams to address the surge of

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patients diagnosed with COVID-19 (Miller et al., 2020). The pandemic's short-term and long-term impact on healthcare worker's mental health and well-being remains largely unknown. Mental health is interconnected with many aspects of everyday life, including employment. The importance of initiatives fostering mental health has been accentuated globally during the current COVID-19 pandemic (Ghebreyesus, 2020).

Early evidence during the pandemic from Thailand indicated that nearly 42.5% of healthcare worker experienced symptoms of anxiety during the COVID-19 pandemic (Pfefferbaum & North, 2020). Another country, in South Korea healthcare workers found that 32.2% of anxiety and 18.5% of depression (Apisarnthanarak et al., 2020). Individuals employed in the healthcare system are more likely to have high levels of stress at their workplace and experience long-term mental health problems than those of different occupations, (Yang et al., 2020) and diminished work performance (Moll, 2014).

Healthcare worker's work performance is a critical issue in occupational health and of greater interest during the COVID-19 pandemic (Birnbaum et al., 2010). A widely accepted definition of work performance includes those behaviours or actions relevant to the organization's goals and related to job responsibilities (Koopmans et al., 2014). Work performance is comprised of three dimensions, including task performance, contextual performance and counterproductive work behaviour. Healthcare worker's work performance includes their job duties such as their job skills, clinical competencies and work quality (task performance), and those that fall outside of the job descriptions (contextual performance) (Campbell, 1990). Finally, behaviours against an organization's goals include being late for work, engaging in off-task activities and not attending work (counterproductive work behaviour) (Rotundo & Sackett, 2002).

The COVID-19 pandemic places significant pressures on healthcare workers' work performance and increases their risk for mental health problems (Borman & Motowidlo, 1993). Front-line healthcare worker are exposed to hazards include pathogen exposure, long working hours, burnout, fatigue, disorders of mental health (e.g., fear, anxiety, depression), occupational stigma, and physical and psychological violence with potential negative impact on patient safety and occupational health (Nowrouzi-Kia et al., 2022). Moreover, infected healthcare worker with previous psychiatric disorder may have a higher mortality rate compared with those with no psychiatric disorders (Greenberg et al., 2020). During crises such as a pandemic, healthcare worker's relationships with family members may be affected and predispose them to mental illness (Li et al., 2020). Specifically, many healthcare workers face the dilemma of providing for family, while also putting their family at risk for disease spread secondary to consistent contact with ill individuals. A functional activity that may be affected is the extent to which healthcare workers participate in and prioritize their physical well-being due to lack of motivation or physical disability resulting from their mental illness (Spoorthy et al., 2020). Studies have found that anxiety and depression were increased among healthcare workers, including nurses and doctors who worked during severe acute respiratory syndrome (SARS) (Pan et al., 2020) and the Middle East respiratory syndrome epidemics (Kim & Choi, 2016).

Therefore, this systematic review aimed to critically assess and provide evidence based on the factors associated with work performance and mental health of healthcare workers during pandemics in Asia based on current knowledge to evaluate strategy targeted at risk healthcare worker's for mental health disorders and improvement of institutional preparedness plan to reduce healthcare workers mental health disorders will help maintain high standard of care and patient safety, while not compromising healthcare workers safety during pandemic.

Research Method

For this review, articles were sourced from science database ; Pubmed and was adjusted using the PRISMA guidelines (Page et al., 2021). The searching process utilized four main keywords, which include (“Work Performance”) OR (“Mental Health”) OR (“Healthcare Worker’s”) OR (“COVID-19”) and (“in Asia”). Descriptive analyses were used to determine the frequency of each mental health status disorders reported in the literature as well as strategies to solve mental health status disorders and factors that associated with work performance. The studies chosen for this review contained information regarding factors of work performance and mental health among healthcare providers working during a pandemic. For instance, anxiety, depression, stresss, knowlegde, etc and study characteristics (e.g. full article, regardless of design, and publication status). The exclusion criteria were duplicated articles, and lack of both prevalence and risk factors of mental health status disorders in healthcare worker's.

Reviewers selected the research based on the eligibility of the articles to be reviewed from the title, abstract, and full text. The reviewers were selecting the articles based on their area of expertise. All articles chosen were published in English. Data taken based on the conditions met, among others, the title, the author, sample size, the study period, the country carried out, the research design, research method, and Factors associated on the mental health and work performance of healthcare workers. Data synthesis was carried out using narrative synthesis. The research area included countries in the Asian continent. To reduce the risk of bias, the reviewers worked independently. The eligible articles were then analyzed qualitatively based on the variables : work performance (productivity, workplace preparedness, employment income, fear of transmission and burnout/fatigue) and mental health (depression, anxiety, stress and inadequate support) of healthcare workers. The review used a PRISMA guideline, a checklist has been carried out using the PRISMA Checklist 2020.

The studies included in this review were 11 articles. From 11 studies, three studies were from China, two studies were from Indonesia, from Turkey, Thailand, Israel, Banglaesh and India. The results were resumed in Figure 1. Based on studies reviewed are factors associated with work performance and mental health of healthcare workers during pandemic in Asia.

Result and Discussion

The COVID-19 pandemic has raised significant concerns about its impact on healthcare worker's mental health (Pappa et al., 2020). Working in life-threatening conditions with increased job demands would likely increase occupational stress, fear of contamination and limit work support (Gohar et al., 2020).

Although it might be challenging to manage workload during unprecedented times, a focus on organizational/workplace factors is recommended. Effective management of work performance needs of healthcare workers require that organizations develop policies, programmes, services and practices that advance the organization's goals and are aligned with the unique job responsibilities of healthcare workers during public health crises. From data in Asia, psychological crisis interventions included three key points : 1) understanding the mental health status in different populations influenced by the COVID-19 outbreak, 2) identifying people who are at high risk of suicide and aggression, and 3) providing appropriate psychological interventions for those in need.³⁴ Compared with non-Asian countries, there were higher rates of depression in the United States (48%), anxiety in both the United States (33%) and Italy (46.4%). Notable, the fear rate in Italy (42.4%) was lower than Asian countries. The incidence of somatizations and obsessive-compulsive traces was higher in situations involving front-line Healthcare worker's. The main risk factors of mental health status disorders among Chinese Healthcare worker's during COVID-19 pandemic were frontline Healthcare worker's, female, older age, nurse, divorced, direct contact treating infected patients, worked for fewer years, longer daily work time, while younger age, female, divorced, lower income, fewer knowledge about COVID-19 were the risk factors of mental health status disorders among non-Chinese Healthcare worker's.¹

Promoting healthcare worker's mental health is a priority for organizations (e.g. employers) and governments. Culture of organization plays an important role for Healthcare worker's compliance to IPC guidelines during pandemics. In addition, individual factor is also important and include Healthcare worker's adherence with IPC (Infection prevention and control) guidelines for respiratory infectious diseases. Suggestions to improve Healthcare worker's anxiety and fear also include improvement of hospital preparedness policy, reliable IPC education on diseases transmission and prevention during COVID-19 epidemics, assuring adequate of PPE, workshops to share knowledge on diseases pre ventions and mindfulness practices (Crescenzo et al., 2022).

Furthermore, the long-term impacts of the COVID-19 pandemic on healthcare workers may lead to long-lasting and harmful mental health outcomes. Therefore, this study has identified work performance and mental health outcomes that employers and governments should prioritize to protect healthcare worker's mental health and well-being. Healthcare workers should be afforded access to mental health services and work within a work environment that fosters a culture of psychological health and safety.³⁶ Work performance should be promoted through a strategy that emphasizes prevention and identifies risk factors to work performance and mental health. Organizations must

implement structures and practices in the work environment that are aligned with work performance.

Conclusion

COVID-19 makes alert and self-awareness especially on appropriate Infection prevention and Control (IPC) practices among Healthcare worker's. This systematic review found factors that associated with work performance and mental health among healthcare worker's in some countries in Asia. And mostly have anxiety, depression, stress. In addition, it can also be used as input for governments and employers as a reference to develop strategies to support healthcare workers' mental health, well-being and work productivity.

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