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COMMENT

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Health behaviours and wellbeing of health workers amidst the COVID-19 pandemic

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Abstract

The coronavirus disease 2019 (COVID-19) pandemic has led to heightened levels of anxiety and stress levels towards the health threats posed by the SARS-CoV-2 virus. At least 10% of those infected were health workers. In addition, a large proportion of infected cases and deaths were possibly due to SARS-CoV-2 infections acquired in hospitals or long-term care facilities. Health workers, especially those working on the frontline play a crucial role in controlling and preventing the COVID-19 pandemic. Previous studies reported that health workers were exposed to severe emotional stress (i.e., burnout, depression and anxiety symptoms) during the outbreaks of infectious diseases including severe acute respiratory syndrome (SARS), Ebola and Middle East respiratory syndrome (MERS). It is therefore important to be aware that prolonged exposure to moderate-to severe stress can have negative health consequences and reduce the work performance of health workers. Therefore, some immediate measures should be taken by the health care institutions and relevant health authorities to ensure that Chinese health workers are better supported in caring for large number of COVID-19 patients. Future studies should examine the health status and work efficiency of health workers working in high stress environment amidst the COVID-19 pandemic or other disasters.

Keywords: Health behaviours; wellbeing; health workers; COVID-19

The coronavirus disease 2019 (COVID-19) pandemic has caused increased anxiety and stress levels to the health threats from the SARS-CoV-2 virus [1-5]. As of May 2022, there have been more than 516 million confirmed cases of COVID-19 globally, including more than 6,258,023 deaths (at https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/). The COVID-19 has been reported to become a hospital infection in some developed countries including the USA whose healthcare systems employ a centralised model at hospital level. There have been at least 10% of infected cases which were health workers. In addition, a large proportion of infected cases and deaths were possibly due to the SARS-CoV-2 infections acquired in hospitals or long-term care facilities [6].

Since the SARS-CoV-2 virus has a long incubation period and can be transmitted from person to person by respiratory droplet infection and by direct or indirect contacted with infected persons, commodities and a contaminated environment, this has posed an overwhelming burden on health care systems [7,8]. Health workers, especially those working on the frontline play a critical role in the control and prevention of COVID-19 pandemic [9]. Previous studies reported that health workers experienced severe emotional stress (i.e., burnout, depression and anxiety symptoms) during the outbreaks of infectious diseases including severe acute respiratory syndrome (SARS), Ebola and Middle East respiratory syndrome (MERS) [10-13]. In addition, to our knowledge, there are limited studies till to date that have investigated the impact of the COVID-19 pandemic on the mental health-related lifestyle changes, family and social support among the health workers, especially over a longer period [14-16]. Therefore, we have provided an overview on health behaviours and wellbeing of health workers amidst the COVID-19 pandemic.

In China, although the restrictive measures implemented by the Chinese government has shown success in containing the COVID-19 pandemic, there are still limited research studies that have assessed the extent to which the disruptions caused by the COVID-19 pandemic affect the Chinese health workers [14]. Health care professions are known to be one of the most stressful professions [9]. For example, health workers who worked in Intensive Care Unit reported that their main source of stress was dealing with the deaths of the patients [9]. In addition, the clinical workload and manning are also one of their main stress sources [9]. Moreover, health workers are required to be responsible for their actions and patients' lives. Therefore, health workers are generally more prone to burnout and stress due to the nature of their job scopes [9].

Male health workers experienced higher levels of occupational stress than female health workers in terms of interpersonal conflict, autonomy and healthcare organisational system, especially during the COVID-19 pandemic [17]. On the other hand, female health workers were also more likely to employ some coping strategies than male health workers when dealing with stressful conditions [9]. Therefore, these may have contributed to reducing the occupational stressful level encountered by the female health workers who enjoyed better mental health than male health workers amid the COVID-19 pandemic [9].

During the early stages of the COVID-19 pandemic, there were ≥3000 health workers who were infected by SARS-CoV-2 in Hubei Province, and of these, 40% were infected in hospitals [18]. The COVID-19 has caused a great threat and psychological pressure, especially to the health workers who already suffer high stress levels in their intensive clinical work [14]. Health workers are important resources for the health care systems to provide continuous care to patients, especially during the COVID-19 pandemic. However, the mental health status of health workers should not be neglected as well. Similarly, during the SARS and MERS outbreaks, health workers reported that they experienced extraordinary stress due to understaffing and high risk of infection [10,13]. In addition, frontline health workers involved in treating COVID-19–infected patients reported an increased risk of developing mental health issues including insomnia, stress, depression and anxiety [15]. Moreover, some frontline doctors and nurses without adequate infectious disease expertise may also encounter some stressful challenges while dealing with COVID-19 pandemic [14]. This is because the SARS-CoV-2 virus is highly contagious and frontline health workers in particular, who were unaware of its transmission, were always afraid of becoming infected if they came into contact with patients who were positive for COVID-19 [14]. In addition, it is possible that asymptomatic SARS-CoV-2 carriers who had no symptoms but were positive for the COVID-19-specific IgM antibodies potentially contributed to the extensive spread of infection to health workers [19]. On the other

hand, health workers were also fearful of accidental occupational exposure and transmission of the SARS-CoV-2 virus to their colleagues and families [14].

The first COVID-19 case was first reported in November 2019 in China and the COVID-19 disease was then rapidly spread throughout China and the world [20]. Studies have reported that amid the epidemic such as SARS, health workers suffered from anxiety, fear and other psychophysiological symptoms, which usually lasted for a long period of time [21,22]. In addition, such high levels of stress among health professionals may affect the quality of service they provide to patients. Therefore, the National Health Commission of China has published national guidelines for psychological crisis intervention and protection of the mental health among the Chinese health workers [23]. About 90% of the health workers recruited from all regions of China to support Hubei Province in combating COVID-19 pandemic were younger than 40 years [24].

In conclusion, it is important to be aware that prolonged exposure to moderate-to severe stress can have negative health consequences and reduce the work performance of health workers. Future studies should examine the health status and work efficiency of health workers working in high stress environment amidst the COVID-19 pandemic or other disasters. Therefore, some immediate measures should be taken by the health care institutions and relevant health authorities to ensure that Chinese health workers are better supported in caring for large number of COVID-19 patients.

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Competing interests

The authors declare no conflicts of interest.

Abbreviations

COVID-19, Coronavirus disease 2019; SARS, Severe acute respiratory syndrome; MERS, Middle East respiratory syndrome.

Citation

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