Impact of COVID-19 pandemic on healthcare workers

ABSTRACT

The COVID-19 pandemic is a healthcare crisis that has led to unprecedented impact on healthcare services. At the heart of the unparalleled crisis, doctors face several challenges in treating patients with COVID-19. The psychological burden and overall wellness of healthcare workers (HCWs) have received heightened awareness, with research continuing to show high rates of burnout, psychological stress, and suicide. Detrimental effects include high rates of infection and death, excessive financial hardships, stress related to known and particularly unknown information, and fear of uncertainty regarding continued impact. Some researchers focused specifically on COVID-19’s impact on HCW sleep. Anxiety and stress were significantly increased, leading to negative impacts on both self-efficacy and sleep. Stress is an important factor in drug use. Efforts should be made to explore the factors that are associated with psychological distress, which may lead to symptoms of anxiety, depression, or provoke suicidal ideation, and efforts should be made to control the factors that are modifiable. There needs to be more awareness among doctors and further long-term studies focusing on their mental health as adverse mental health conditions will further affect them as the disease advances.

Keywords: Anxiety, burnout, doctors, frontline workers, stress

COVID-19, one of the major catastrophes of this century, started as a mere local transmission from the city of Wuhan in China and spread throughout the world. The COVID-19 pandemic is a healthcare crisis, leading to unprecedented impact on healthcare services, notable morbidity and mortality of the public and healthcare workers (HCWs), economic repercussions, and significant psychological effects. To reduce the risk of viral transmission from person to person during the pandemic, the Indian government introduced various measures such as “lockdown” on March 23, 2020, along with strategies such as “social distancing” and “self-isolation” and shielding of at-risk individuals.1-3 Doctors who are responding to a global health crisis – trying to protect individuals, families, and communities in adverse situations with stretched resources and shortage of personal protective equipment (PPE) and other – have become targets in the fight against the pandemic which was always unexpected. At the heart of the unparalleled crisis, doctors face several challenges treating patients with COVID-19: reducing the spread of infection; formulating some suitable short-term strategies and long-term plans. The overall wellness and especially the psychological burden on doctors have received heightened awareness in media and research publications.

HCWs must also continue to maintain their personal responsibilities and treat non-COVID patients. Detrimental effects include high rates of infection and death, excessive financial hardships, stress related to known and particularly unknown information, and fear of uncertainty regarding continued impact. Some researchers focused specifically on COVID-19’s impact on HCW sleep. Anxiety and stress were significantly increased, leading to negative impacts on both self-efficacy and sleep. Stress is an important factor in drug use. Efforts should be made to explore the factors that are associated with psychological distress, which may lead to symptoms of anxiety, depression, or provoke suicidal ideation, and efforts should be made to control the factors that are modifiable. There needs to be more awareness among doctors and further long-term studies focusing on their mental health as adverse mental health conditions will further affect them as the disease advances.
unknown information, and fear of uncertainty regarding continued impact. Doctors experience emotional exhaustion, which may lead to medical errors, lack of empathy at times, decreased productivity, and higher turnover rates. The ability of doctors to adequately cope with stressors is important for their patients, families, and themselves. The levels of psychological resilience and the ability to positively adapt to adversity and to protect themselves vary considerably from person to person, in general.

Before COVID-19, wide-ranging research had established the multifactorial nature of stressors for doctors: electronic health record duties; insurance and billing issues; any patient dissatisfaction; and balancing busy work–life schedules. They must continue to balance these existing obstacles to wellness while facing the unique challenges of a pandemic. Despite the challenging situation the HCWs realized that it was a part of their duty to care for the affected patients, thus demonstrating immense dedication to their profession. The authors noted that workplace safety including access to PPE was a top priority. Women and individuals in high-risk areas may have more negative psychological health outcomes. Moreover, both doctors and other HCWs on the forefront of caring for COVID-19 patients are prone to anguish and negative health outcomes, including loneliness, anxiety, and disturbed sleep. It is interesting to know that some HCWs who were working as front-liners experienced better mental health outcomes. The explanation could be control over the environment while they were at work and a sense of satisfaction from their vocation.

From experience, we know that in the face of situations like these, HCWs play a major role and push their limits every day. Being in the frontline, doctors take brunt the most. Due to complete uncertainty, the situation is further complicated. Lack of proper fixed guidelines, unprepared and overburdened infrastructure, as well as the fear, stigma, anxiety, and marginalization toward the disease add to the burden. Overall, doctors have a high prevalence of mental health morbidities, but the topic is very less researched.[2,3]

Moreover, it affects their work output which, in the pipeline, affects the healthcare delivery to the whole nation.[2,3]

**Burnout**

Burnout in 220 medical staff working in oncology medical in Wuhan, China, was measured using the Maslach Burnout Inventory–Medical Personnel. Burnout in the frontline was compared to other groups of HCWs. Surprisingly, the frontline HCWs had significantly lower levels of burnout and were way less worried about becoming infected when compared to the ones in the usual wards. There were two possible explanations that were deduced; the first being that the frontline HCWs perceived more control over the situation and second being that they appear in proximity to decision-making compared to other HCWs. Another explanation is that they are provided with more realistic scenarios and timely information.[7,8]

**Sleep**

Under conditions of psychological distress, sleep is usually disturbed. A survey was carried out among 180 medical staff members on social support, anxiety, stress, self-efficacy, and sleep quality to determine the effects of COVID-19. It was found that social support correlated significantly with both self-efficacy and quality of sleep. Anxiety and stress were significantly increased, leading to negative impacts on both self-efficacy and sleep.

**Addictions**

Stress is an important factor in drug use. Researchers have shown that major stressors increase the risk of developing an addiction, as well as the risk of relapse. Stress, fear, and anxiety have increased, too, for people on the frontlines as they faced the graveness danger.

**Stress, anxiety, and depression**

It was reported in March 2020 that, among doctors in China, up to 40% had mild-to-moderate depressive symptoms.[9] However, another survey on a small number of HCWs in China found that the workers showed signs of psychological distress during the pandemic. The data are sparse when it comes to the effect of the pandemic on health of doctors in developing countries, but a recent survey done in 2016 among doctors working in a tertiary care hospital in Pakistan reported an association of female gender and more service years with anxiety and depression.[10] Moreover, younger physicians (aged 35 years or less) were more liable to be depressed than older doctors. Having children at home was another factor associated with anxiety and depression, and younger doctors were more likely to have children at home and hence more likely to be worried and anxious about taking the infection back home and hence distressed by this fact.

**MANAGEMENT**

Efforts should be made to explore the factors that are associated with psychological distress, which may lead to symptoms of anxiety, depression, or provoke suicidal ideation, and efforts should be made to control the factors that are modifiable. The HCWs should be encouraged to use the existing support systems, be it family, friends, and coworkers, to share experiences and diffuse them, stabilize emotion, and maintain social connections, thus ultimately reducing anxiety and also enabling an increase
in the quality of sleep.\[^{[11]}\] Administrative measures should be taken to reduce the longer duty hours so that it does not overburden the doctors. Majority of them were giving duties for 6–12 h, which is a good thing; however, at the same time, it has to be kept in mind that the study was done during the early phase of the pandemic. As time passes, the duties, pressures, infected HCWs, and the duration of quarantine are among the factors that may affect the overall mental health in the future.\[^{[12,13]}\]

**CONCLUSION**

There needs to be increased awareness among doctors and further long-term studies focusing on their mental health should be planned. Specific screening strategies should be implemented for the frontline workers as adverse mental health conditions will further affect them as the pandemic advances.

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There are no conflicts of interest.

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