

Impact of COVID-19 on Psychological and Emotional Well-being of Healthcare Workers

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ABSTRACT

Background: Coronavirus disease-2019 (COVID-19) in the last few months has disrupted the healthcare system globally. The objective of this study is to assess the impact of the COVID-19 pandemic on the psychological and emotional well-being of healthcare workers (HCWs).

Materials and methods: We conducted an online, cross-sectional, multinational survey, assessing anxiety [using Generalized Anxiety Disorder (GAD) Scale: GAD-2 and GAD-7], depression (using Center for Epidemiologic Studies Depression Scale), and insomnia (using Insomnia Severity Index Scale), among HCWs across India, the Middle East, and North America. We used univariate and bivariate logistic regression to identify risk factors for psychological distress.

Results: The prevalence of clinically significant anxiety, depression, and insomnia was 41.4%, 48.0%, and 31.3%, respectively. On bivariate logistic regression, lack of social or emotional support to HCWs was independently associated with anxiety [odds ratio (OR), 3.81 (2.84–3.90)], depression [OR, 6.29 (4.50–8.79)], and insomnia [OR, 3.79 (2.81–5.110)]. Female gender and self-COVID-19 were independent risk factors for anxiety [OR, 3.71 (1.53–9.03) and 1.71 (1.23–2.38)] and depression [OR, 1.72 (1.27–2.31) and 1.62 (1.14–2.30)], respectively. Frontliners were independently associated with insomnia [OR, 1.68 (1.23–2.29)].

Conclusion: COVID-19 pandemic has a high prevalence of anxiety, depression, and insomnia among HCWs. Female gender, frontliners, self-COVID-19, and absence of social or emotional support are the independent risk factors for psychological distress.

Keywords: Anxiety, Depression, Healthcare workers, Insomnia, Psychological distress.

Indian Journal of Critical Care Medicine (2021): 10.5005/jp-journals-10071-23833

In the context of the global disruption in socioeconomic conditions and the death of more than 2.8 million people worldwide to date, healthcare workers (HCWs) are the first line of defense to combat this disease. The psychological consequences such as depression, anxiety, stress, and health workers' perceptions of coronavirus disease-2019 (COVID-19) based on environmental factors, professional strength, and societal stigmatization weaken and incapacitate health workers, who are at greater risk because of poor working conditions.

The author has done an extensive multinational survey on the psychological impact of COVID-19 among HCWs of different backgrounds. Stress-related anxiety, depression, and insomnia have been captured through various feedback questionnaires and finally identify risk factors for psychological distress through respective scaling.¹ The study concluded that the prevalence of anxiety (41.4%), depression (48%), and insomnia (68.7%) was high among HCWs in this survey, and similar findings were reported from other surveys.^{2–4} Moreover, younger adults (<40 years), female gender, lack of emotional support, professional role as a frontline HCW had a significantly higher prevalence of psychological symptoms. Female gender, frontline workers, self-illness with COVID-19, and absence of social or emotional support are the independent risk factors associated with psychological distress among HCWs.

"Stress doesn't come from what's going on in your life. It comes from your thoughts about what's going on in your life."

—Andrew J. Bernstein

We human beings are curious by nature. We strive to predict, understand, and control our lives, and when stress increases, this

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How to cite this article: Bhattacharya PK, Prakash J. Impact of COVID-19 on Psychological and Emotional Well-being of Healthcare Workers. *Indian J Crit Care Med* 2021;25(5):479–481.

Source of support: Nil

Conflict of interest: None

leads to significant discomfort. An inability to cope with the stress affects our mental health. Most humans suffer from stress in their day-to-day lives, primarily related to family and relationships, profession, disease, health and fitness, and many more in this competitive world. However, the current pandemic is unique because it impacted billions of people on an immense scale in a short period.

For HCWs, it is a dual stress situation. On the one hand, care of infected people with full responsibility and a hard struggle to protect and keep themselves noninfected and healthy.

It is probably the first time that such a daunting situation arose, which created a high uncertainty level among human beings. Although not visible, it is the HCWs who got the closest feeling of all those uncertainties. Some truly relevant uncertainties among HCWs

were how long one could stay safe! There is no definite treatment! Whether we will recover or not if we get infected! For females, how to save their kids and other family members.

It did not give time to adaptation; encroachment was fast. It exhausted healthcare resources. Many deaths happened because of the nonavailability of resources and treatment. HCWs are forced to work long hours while under extreme stress in these conditions. When treating sick people, they run the risk of being infected. On the other hand, they, like other people, are subjected to a significant amount of false news and misinformation, all of which contribute to their anxiety.⁵

Completely cutoff from family support because of repeated rotation duties and quarantines and fear of spread to near and dear. Prolonged wearing of personal protective equipment (PPE), negative messages from social media, failure to discriminate between myths and facts were other precipitating factors.

In this pandemic, many things happened for the first time, like complete lockdown of the country, social distancing, cremation of near and dear under administrative control, full restrictions on rituals for lost family members. Claustrophobic PPEs, lengthy quarantines, no clue of any treatment, and no clue of any protective vaccine are the first time where the entire world was confused.

Sleep disturbance and poor sleep quality impacted a large number of medical workers, which is unsurprising. Sleep quality and social support were related to anxiety, stress, and self-efficacy as mediating variables. Anxiety levels had a negative impact on sleep quality.⁶

Insomnia leads to comorbid mental disorders, particularly depression and anxiety. Persistent insomnia may represent a risk factor and an early symptom for bipolar, depressive, and anxiety disorders.⁷ Nondepressed people with insomnia have a doubled risk of developing depression than people with no sleep difficulties.⁸ On the other side, risk factors for developing insomnia could be both depression and anxiety. Depression, anxiety, and insomnia are part of a vicious cycle with two more components to understand: anxiety sensitivity and the other: intolerance of uncertainty (IU). Anxiety sensitivity is conceptualized as an amplification factor that exacerbates anxiety, panic, and other forms of distress.⁹

IU has been defined as "A dispositional characteristic that results from a set of negative beliefs about uncertainty and its implications and involves the tendency to react negatively on an emotional, cognitive, and behavioral level to uncertain situations and events."¹⁰

Screening tools used in this study were the "Generalised Anxiety Disorder (GAD) scale" for anxiety, "Center for Epidemiologic Studies Depression scale" for depression, and "Insomnia Severity Index (ISI) scale" for insomnia. ISI is limited to DSM-IV criteria (the predominant complaint is difficulty initiating or maintaining sleep, or nonrestorative sleep, for at least 1 month) for an insomnia disorder and assesses symptom severity but fails to measure sleep disturbances frequency and quality. It was proposed that anxiety and depression remained interlinked, and the therapeutic relationship may be a critical factor in understanding the early impact shown and that future studies should focus on direct measures of the relationship.

Cognitive theories of psychopathology maintain that IU and anxiety sensitivity confer a higher risk of developing anxiety and depression.¹¹

Prevailing IU among HCWs was much higher than presumed, creating its impact maximally on sleep disturbance followed by depression and anxiety, as has been finally observed in the form of percentage outcome in this study.

IU was strongly associated with anxiety sensitivity, influencing insomnia via depression and anxiety. On the contrary, anxiety and depression may also have a direct impact on insomnia severity. In one of the studies published recently, the author has demonstrated through a mediation model that how prospective anxiety and inhibitory anxiety, which are reflections of IU and depression anxiety and stress which are reflections of anxiety sensitivity, come into play between fear of COVID-19 and positivity. The concluding remark is IU, depression, anxiety, and stress had a mediating role in the relationship between the fear of COVID-19 and positivity.¹² The gender difference in fear of COVID-19 was consistent with the finding that the coronavirus pandemic causes more psychological effects in females^{12,13} and findings of previous studies on mental health in women.¹⁴ Gender is one of the nominal variables that determine the health and disease status of individuals.

Following general tips can apply to HCWs especially frontline junior doctors, to help them develop better control of the situation:

- Most reflected data through social media may be flawed.
- It is always better to act on the current evidence which you have; evidence to your current question may take a long time to come.
- Avoid believing in openly floated data, try to find the facts from the source of origin.
- Deliberation of workplace-based problems among stakeholders may generate a multifaceted solution.
- The pragmatic approach always helps to find solutions in difficult situations.

Ideally, avoiding such stress disorders among HCWs requires frequent screening with some preset questionnaires followed by proper counseling and assurance from trained psychologists regularly. Frequent change of HCWs can be one modality, but it is practically impossible due to their limited numbers in healthcare organizations and ample patient coverage.

Prolonged duty hours can be avoided. Shifts of shorter duration, followed by a reasonable relaxation period, are one method to reduce the total contact period of HCWs. From time to time, acknowledgment and encouragement by the hospital administration will help boost the morale of HCWs. Additional incentives will always help and encourage their work performances. To avoid loneliness in the quarantine area, good provision of entertainment facilities should be there. Provision of choice food and beverages for HCWs after duty hours and the quarantine zone can become a good mood changer. After all, the final attempt should be to develop a good culture and team spirit; good communication and relationships with seniors and team members will never allow these psychological problems to develop among HCWs.

The current article suggests that COVID-19 has badly ruled the psychology and emotions of HCWs and let them suffer from insomnia, anxiety, and depression. Here, the HCWs need to understand that uncertainty about the future need not rule their lives. It is always better to focus on life in the present and spend less time worrying about what might come in future. It is always better to believe in known expectations or no expectations rather than unknown expectations.

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