

# Mental Health Consequences of COVID-19 Pandemic on Health Care Workers

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## ABSTRACT

**Background:** The recent pandemic situation that resulted from the Coronavirus Disease 2019 (COVID-19) outbreak has had a significant impact on nearly every element of the society. The pandemic has put a lot of danger on the mental and physical wellness of frontline healthcare workers and supporting hospital staffs since they are the sole in charges of the diagnosis and treatment of the COVID-19 infection. According to studies from China, Italy, Turkey, Spain, and Iran, healthcare workers have a higher frequency of having psychological impacts than the overall population. Being a HCW, being a woman, having a lower socioeconomic level, having a greater chance of contracting COVID-19, and social isolation were all common risk factors. On the contrary, having enough medical resources, having up-to-date and accurate knowledge, and having enough medical resources were all protective factors.

**Objective:** This review was primarily centred to look into the prevalence of psychological problems in different types of healthcare workers (doctors, medical residents, nurses, technicians, and public health workers) during the COVID-19 pandemic, as well as the factors that are linked to the onset of psychological problems in this population during a public health crisis.

**Methods:** Original papers, reviews, preprints, and letters to editors relating to our topic were reviewed using keyword searches in PubMed, Web of Science electronic databases, Asian Journal of Psychiatry. Ten amongst them were finally chosen. This article presents a systemized review of them after extensive and rigorous research.

**Conclusion:** Actions are required to reduce the effects of COVID-19 on mental health by protecting and improving the psychological well-being of healthcare professionals during and after the epidemic. Analysing rates of mood, sleep, and other mental health difficulties is thus a primary priority in order to find moderating factors and tailor therapies.

**Key words:** Psychological impact, COVID-19, Stress, Anxiety, Depression

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## INTRODUCTION

The current by and large circumstance of a pandemic has affected humankind taking everything into account and still continues to make disturbance among all areas of the overall people, be it those from monetarily weaker establishment or the prosperous part of the overall people. Right when the entire human race is coordinating such a circumstance, it is seen that strain and fear among the greater part becomes by goodness of nonattendance of data and nonappearance of arranging of clinical benefits structure. Through this article, I want to include the effects of such an astounding mass event and particularly illuminate its suggestions for mental prospering of

individuals. It other than plans to show the gravity of the issues related to mental prosperity and how the proportion of people affected is drastically creating. The article will in like manner inspect about various methodologies for directing pressure and procedures for regulating strain, apprehension, etc. to keep us mentally strong what's more propose frameworks to progress enthusiastic health as required construction up a positive environment during such seasons of crisis.

Pandemics increase workload and generate worry, anxiety, terror, frenzy, and hysteria in individuals in general, and in health care workers in particular, because HCWs are on the front lines of fighting the problem [1-2]. The current epidemic has made HCWs more susceptible to contracting the virus, resulting in heightened mental stress. They are concerned, terrified, and mentally scarred about their families contracting the sickness, as well as their own health. Appropriately any rational person would agree that enthusiastic achievement of prevention is more important. An individual should be Coronavirus positive when the

specific tests positive in a RT-PCR test. A CT Chest has wound up being significant in reprimanding the risk of intricacies. Imaging uncovers dim changes like that of pneumonia. By and by, there is no decisive treatment for Coronavirus, yet a couple of cures like dexamethasone have displayed to diminish the reality of contamination.

## LITERATURE REVIEW

### Corona and its effects on mental health

Irrational and wild dread relating to the infection and its spread is one of the most conventionally experienced mental prosperity issues. The dread of contamination and the shortcoming of the course of sickness and its annoys is expanded definitely in individuals who feel that they are "perhaps ruined", particularly just in the wake of helping out RT-PCR incredible individual. Impressions of anxiety are stretched out if they dread contaminating different individuals from the family further tangling the circumstance. Unavoidable nervousness about moving toward pulverization, pity, and losing friends and family adds on to a previously repulsive situation. "Social suppression identified with obstructions and lockdown measures are related with energies of soft spot for the future, dread of new and dull infective specialists accomplishing strangely expanded fear." Effects of segment are recognizable speedily which shows as weariness and negative examinations. This astoundingly influences mental and genuine flourishing of the person. Such partition comparatively has extended length impacts of nonstop hopelessness, consistent nervousness and absurd affinities. For us to say that this pandemic is a cake walk is underhanded. It has impacted all spaces of society and individuals of all age packs including adolescents, youngsters, grown-ups and more settled. For school going youngsters, it had been an adjust in setting from the old style strategies for instructing to the most safe kinds of automated planning.

Since the beginning of the pandemic throughout the world, there has been a psychological and physical burden of greater risk of infection, isolation, weariness, fewer safety facilities, and lack of contact with family among health care personnel. It is causing more mental health issues, which may limit their capacity to function successfully and have long-term negative consequences for their health [1-4].

Although HCWs are trained to deal with medical emergencies, they are not immune to the psychological stress and trauma that they can produce. Front-line personnel are more psychologically stressed than others since they are immediately involved in dealing and managing patients [1-2]. One obvious factor is the rise in illness and mortality rates among medical personnel. Stigma, powerlessness, irritation, worry, anxiety, and fear of discrimination may result from the abrupt transition from warrior to victim. The reasons for such outcomes are several [5]. They include a lack of moral and monetary support, insufficient personal safety equipment, increased workload, and media-induced hysteria. The SARS outbreak a decade ago also

demonstrated that Health Care Professionals without prior emergency management expertise have a lower mental health condition, and they are more likely to be affected by psychological stress, phobic anxiety, and interpersonal sensitivity [6-7]. Thus, HCWs must have extensive professional experience, emergency management training, and social support. Despite the fact that several studies have been conducted since the beginning of the pandemic to analyse the psychological impact of COVID-19 on health-care personnel, however, comprehensive review and analysis of existing studies are lacking [8-10].

## MATERIALS AND METHODS

Several investigations on the frequency of mental health disorders among HCWs were undertaken during the pandemic, and a close link was found between the disease and the epidemic. This review was focused on presenting a systematic evaluation of the research done in this area so far. An attempt was made to explore the link between COVID-19-related variables and HCW mental health difficulties.

**Article selection:** Articles from PubMed, Research Gate, PJSMBlog, Google Scholar, and Asian Journal of Psychiatry were searched using keywords and filters. The terms psychological, stress, mental health, and psychiatric concerns were used, as well as COVID-19, corona, new corona virus, and HCW, or doctors, medical staff, or health care professionals. Original articles, reviews, commentaries, and letters to editors that were relevant to our analysis were extracted, and reports were taken and analyses through cross-references where applicable.

**Inclusion and exclusion criteria:** Original articles about our topic that were published in the last few months were included. The titles of studies that did not fulfil the inclusion criteria were filtered out.

**Description of articles selected:** After a preliminary search and screening, 24 articles were chosen. There were 5 original articles, 3 editorials, 4 reviews, 5 correspondence/commentaries, and 7 letters to the editor among them. Following a final screening, 9 articles were selected of which, 6 of them were from China [1-5] two from Pakistan [11,12] one from India [13].

## RESULTS

**Socio-Demographic variables:** The participants evaluated ranged in age from 26 to 40 years old, with the bulk of the participants being female (68.7%-85.5%). Being a woman with an intermediary work has been associated to higher levels of anguish, worry, stress, and depression, according to studies. Similarly, medical workers under the age of 30 had increased self-rated depression. HCWs aged 31 to 40 were more concerned about their families, whereas those aged 50 to 60 were more stressed by a patient's death. For HCWs between the ages of 41 and 50, personal safety was a major concern. Older employees reported greater stress as a result of increased workload and a lack of Personal

Protective Equipment. All of the HCWs were concerned about the lack of effective COVID-19 treatment and the safety of their co-workers [1]. The department of HCW had no statistically significant relationship with self-reported anxiety and sadness ratings. The score did not alter considerably depending on whether the HCW worked for a corona-related department or not. Depressive symptoms, fear, stress, and anxiety were shown to be higher in frontline workers and nurses. These symptoms were reduced, and self-efficacy was improved, thanks to social support [14].

**Mental factors:** The impact of social assistance on HCWs' self-viability, sleep quality, anxiousness, and stress levels are significant. The findings suggested that clinical experts' nervousness and emotions of anxiousness were reduced as a result of the social assistance they received, and their self-viability was increased [15]. Individual security issues, concerns for their families, and fears about persistent fatality were the major sources of stress for the clinical personnel. According to the findings of a survey conducted in 34 emergency clinics across China, 3/4<sup>th</sup> of the workers in question were in trouble, half of them reported depressed symptoms, 1/3<sup>rd</sup> of them detailed a sleeping condition, and 2/5<sup>th</sup> of them reported discomfort symptoms. Individual feelings of dread and worries about being a source of infection, being isolated, putting relatives and other staff in danger, dread of inappropriate use of PPE, and dread of family unit issues due to lockdown and clinical protection were revealed in research conducted in Pakistan by wellbeing experts [5].

**COVID-19 Related Stress:** One of the studies looked into the factors that contributed to the decrease in worry caused by COVID-19 [1]. The well-being of the family played the most important influence in lowering pressure. Surprisingly, effective direction, successful preventive measures, and inspirational mentality from their partners also contributed to reduce anxiety (especially among female employees). The amount of time spent in touch with diagnosed or suspected COVID-19 patients was linked to high levels of anxiety, whereas mental help was linked to the severity of emotional distress [8].

**Coping and psychological care needs:** Medical professionals' coping approach for dealing with the present pandemic was to develop strong protective measures, social isolation measures, viral prevention and transmission awareness, social support, and a positive self-attitude [1]. Healthcare workers with greater degrees of mental illness, such as doctors and paramedics, were more interested in acquiring methods for their own rescue. These employees expressed a strong desire to seek help from psychiatrists and psychologists [8].

**Concerns about the patient's care:** One of the needs of patients in isolation is medical care and therapy. They need social, psychological, and rehabilitative help as well. All of these can't be taken care of by the treating physician alone. All of these requirements cannot be met

alone by the medical personnel present. For the on-call medical provider, this can be stressful and exhausting. A crucial issue that must be addressed is the patient's financial and social needs, as well as the welfare and safety of the patient's family. Patients have no one else to turn to because the attending medical team cannot handle these difficulties. The creation of a multidisciplinary team that can assist in the rapid identification of problems in various patient areas is urgently required [13].

## DISCUSSION

According to a review, a significant number of people are experiencing psychological disorders such as anxiety, trepidation, insomnia, and bewilderment as a result of the COVID-19 epidemic. These mental disorders are related to how it is transmitted, how quickly it spreads, and the lack of treatment regimens or vaccines. In comparison to the SARS pandemic, this was even more calamitous due of widespread global media connectivity. According to a report, the primary risks for the development of health problems are related to the media, such as a lack of social support, a lack of professional training, poor management, and a lack of communication. The impact of social support on health conditions such as insomnia, frustration, and depression was examined in this review. It reveals that working personnel, such as nurses, had higher levels of anxiety and sadness than doctors. A few suggestions for dealing with the mentioned challenges.

Medical institutions dealing with COVID-19 should have procedures, systems, and standard operating procedures in place to deal with any situation. Patient consideration, health equipment, and risk stratification guidelines should all be easily accessible and updated on institutional websites. The entire clinical team should be informed on the balanced use of PPE on a regular basis to ensure their safety while also ensuring that assets are used efficiently. Because COVID-19 duty is unquestionably demanding and difficult, clinical staff's duty hours should be reduced (for example, to 16 hours) every work day to avoid burnout.

Institutions must comply and segregate their infected employees. Regardless of limited resources, this office must be made accessible to HCWs on the COVID-19 responsibility in any case, because an enormous number of them may not feel content with returning to their families in this state.

Setting up an online COVID-19 assistance cell in each foundation would be a sure-fire way to address HCWs' mental health and human service's needs. It will also provide a forum for HCPs who may be feeling overburdened by their responsibilities to discuss crucial topics and avoid burnout.

At last, individual flourishing is an ethical commitment. In the event that a HCW is experiencing respiratory signs and doesn't want to jeopardize others, it is their commitment to stay back and give a reasonable explanation to their decision. Portraying standard

working procedures for HCWs as such would abstain from ambiguity, enable singular choices, and diminish parcel.

**Major Limitation:** The key limitations of these researches are a lack of sample or small sample size and pertinent measurable information on the subject of psychological wellness challenges among medical care suppliers during the current Coronavirus pandemic.

### CONCLUSION

During the pandemic's lockdown, increased levels of worry, rage, reluctance, perplexity, and post-traumatic distress have been documented, particularly in Pakistan. This pandemic has had the greatest psychological impact on health-care workers. For all healthcare and related personnel fighting the pandemic on the front lines, a high degree of professional experience, thorough training, social support, and resilience are required. HCWs' mental health should be closely monitored, and a specific strategy should be established to address and resolve their psychological difficulties.

### Headings to keep yourself intellectually strong

Comprehend that Coronavirus has impacted individuals in different ways, possibly the clearest region being mental prosperity. Right when the whole human race is managing such a situation, it is perceived that tension and dread among the bigger part becomes considering nonattendance of information and nonappearance of readiness of clinical advantages framework. Understanding the gravity of the issue, and going similarly shown by the power situation, we really need to quit enduring fake information which didn't depend upon any examination and is known to us through verbal exchange or WhatsApp pushes. Legends about RT-PCR testing and spread of disease (it spreads through air drops and besides through surface transmission) through the indistinguishable ought to be dropped. Masses ought to in like way be told about the significance of getting endeavoured at dispensed examination centre. This will assist with decreasing the dread of the dim and the impression of pushing toward destruction which will eventually assist them with being intellectually fit. Perhaps the best strategy for keeping ourselves fit, both truly and intellectually, is a kind of genuine work, how much whenever is conceivable inside the limits of the actually compelled rules, avoiding anticipated that danger should shield oneself similarly as others from this illness. It has been found through different inspects that activity in some plan or different collaborators you where it counts, truly and intellectually.

### REFERENCES

1. Cai H, Tu B, Ma J, et al. Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of coronavirus disease 2019 (COVID-19) in Hubei, China. *Med Sci Monit* 2020; 26:924171-924181.
2. Tam CW, Pang EP, Lam LC, et al. severe Acute Respiratory Syndrome (SARS) in Hong Kong in 2003: stress and psychological impact among frontline healthcare workers. *Psychol Med* 2004; 34:1197-1204.
3. Lee SM, Kang WS, Cho AR, et al. Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined haemodialysis patients. *Compr Psychiatry* 2018; 87:123-127.
4. Styra R, Hawryluck L, Robinson S, et al. Impact on health care workers employed in high-risk areas during the Toronto SARS outbreak. *J Psychosom Res* 2008; 64:177-183.
5. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA netw open* 2020; 3:203976.
6. Wu KK, Chan SK, Ma TM. Posttraumatic stress after SARS. *Emerg Infect Dis* 2005; 11:1297.
7. Wu KK, Chan SK, Ma TM. Posttraumatic stress, anxiety, and depression in survivors of Severe Acute Respiratory Syndrome (SARS). *J Trauma Stress* 2005; 18:39-42.
8. Kang L, Li Y, Hu S, et al. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. *Lancet Psychiatry* 2020.
9. Li Q, Guan X, Wu P, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N Engl J Med* 2020.
10. Liang Y, Chen M, Zheng X, et al. Screening for Chinese medical staff mental health by SDS and SAS during the outbreak of COVID-19. *J Psychosom Res* 2020; 133:110102.
11. Cai W, Lian B, Song X, et al. A cross-sectional study on mental health among health care workers during the outbreak of Corona Virus Disease 2019. *Asian J Psychiatr* 2020; 51:102111.
12. Sandesh R, Shahid W, Dev K, et al. Impact of COVID-19 on the mental health of healthcare professionals in Pakistan. *Cureus* 2020; 12.
13. Mohindra R, Ravaki R, Suri V, et al. Issues relevant to mental health promotion in frontline health care providers managing quarantined/isolated COVID-19 patients. *Asian J Psychiatr* 2020; 51:102084.
14. Xiao C. A novel approach of consultation on 2019 novel coronavirus (COVID-19)-related psychological and mental problems: structured letter therapy. *Psychiatry Investig* 2020; 17:175.
15. Ho CS, Chee CY, Ho RC. Mental health strategies to combat the psychological impact of COVID-19 beyond paranoia and panic. *Ann Acad Med Singap* 2020; 49:1-3.