Review Article

Effect of COVID-19 on Mental Health of Health Workers

ABSTRACT:

Healthcare personnel have been put in an unusual scenario from the effect of COVID-19 epidemic, which had increased thier psychological and mental health anguish. Anxiety, sadness, and stress among healthcare workers have been the subject of several studies. Increased psychological stress has been shown to have negative consequences for a person's physical health. Psychological pressures may increase the present health problems of the healthcare workers having pre-existing co morbidities. Frontline COVID-19 healthcare personnel are being pushed to their breaking points, leading to suicidal ideation. Furthermore, the stress of a having heavy workload and burnout may present itself in very serious ways in family relationships and a desire to leave their occupations. Future study should focus on the aforementioned negative consequences in order to aid in the development of mental healtcare approaches to manage COVID's psychologic impact on healthcare workers in an outbreak. for care and sustain the psychologial well-being of healthcare workers, it is necessary to employ techniques and policies.
The COVID-19 has been shown to have a negative influence on the mental health of healthcare professinals who work in disaster response. A large number of Health workers (PTSS) have been connected to posttramatic stress disorer (PTSD) and posttrumatic stress symptoms. As risk and ressilience factors, exposure level, job title, year of exprience, social and work support, workplace organisation, quaratine, ages, gender, maital status, and copying style were all found to be significant. These characteristics must be considered when developing effective intervention planning for HCWs facing with the current COVID-19 outbreak in order to improve their condition and limit the risk of unfavourable outcomes.(1)

Objective: The objectie of the study is to provides a brief review on the Effct of Covid-19 on mental health of health workers.

KEYWORDS: Covid-19; mental health; post-traumati stress disorder (PTSD); crisis management; critical care; leadership; medical staff; morl injury; pandemic; physician well-being .

INTRODUCTION:

SARS-CoV2, a novel corona virus discovered in Wuhan, China, has sparked a huge impact of COVID-19 pneumonia. COVID-19 has been declared a public health emergency by the WHO. By April 27th, 2020, 4 months after the pandemic began, Covid-19 had caused over 2,800,000 confired cases and approximately 200,000 death. The need for healthcare workers skyrockets when a severe pandemic breaks out. Increases in confirmed cases, fatality rates, a lack of specific therapy or immunizations, widespread media coverage, a large workload, a lack of personal protective equipment, and feelings of being undersupported can all add to medical personnel's mental stress. Anxiety, melancholy, burnout, insomnia, and stress-related issues are all common among front-line HCWs. These are largely mediated by an individual's psychological and biological security flaws; however, socio-enviromental factors such as the risks of infection, effective risk communication to Health care workers, availability of

personal protective equipment, job-related stress, perceied stigma, and the psychological effect of isolation/quarantine, as well as distancing, also play a role.(1) In these circumstances, HCWs are required to work long hours and under extreme stress. If the mental health concerns that have arisen as a result of the pandemic are not addressed when treating sick people, they risk becoming infected.(2) On the other hand, they, like the rest of us, are continuously bombarded with false information and rumours, which adds to their anxiety. Several HCWs were infected with SARS-CoV-2 after coming into close contact with infected patients, according to reports. HCWs accounted for 29% of all hospitalised patients during the early phases of the SARS-CoV-2 outbreak. Medical personnel working in these conditions are exposed to a varety of psychiatric and mental diseases, as well as physical and emotioal stress.(2)

Material and Methodology:

In this narrative review we retrieve the literture on 'Effect off Covid 19 on the mental health of health workers' from PubMed, Medscape, Cochrane Database of systematic review, Google scholar. While searching various databases the advanced search option was used and all relevant articles from 2011 to 2021 were considered. The following key words and phrases were used in various combinations: 'Mental health', 'Covid infection', 'mental condition of health workers. Reference lists from relevant publications were also looked into as a possible source of information. There were no attempts to locate the unpublished data.

In the early stages of the pndemic, emotions of uncertainty, the threat of death, and substantial susceptibility indicated by physiological and cognitive anxiety symptoms were pervasive, according to a study of 1257 health workers who handled SARS-infected patients. On the other hand, symptoms such as despair, worry, traumatic stress, avoidance, and weariness were documented even after the outbreak. Many people are anxious about their daily lives because hospitals are "overburdened." This global situational framework has the ability to put healthcare workers in a situation where they have never been before, putting them under great stress. As a result, healthcare workers are more prone to psychological and mental health issues. As a result, medical personnel's mental health should be considered a public health priority in this urgent situation.(3)

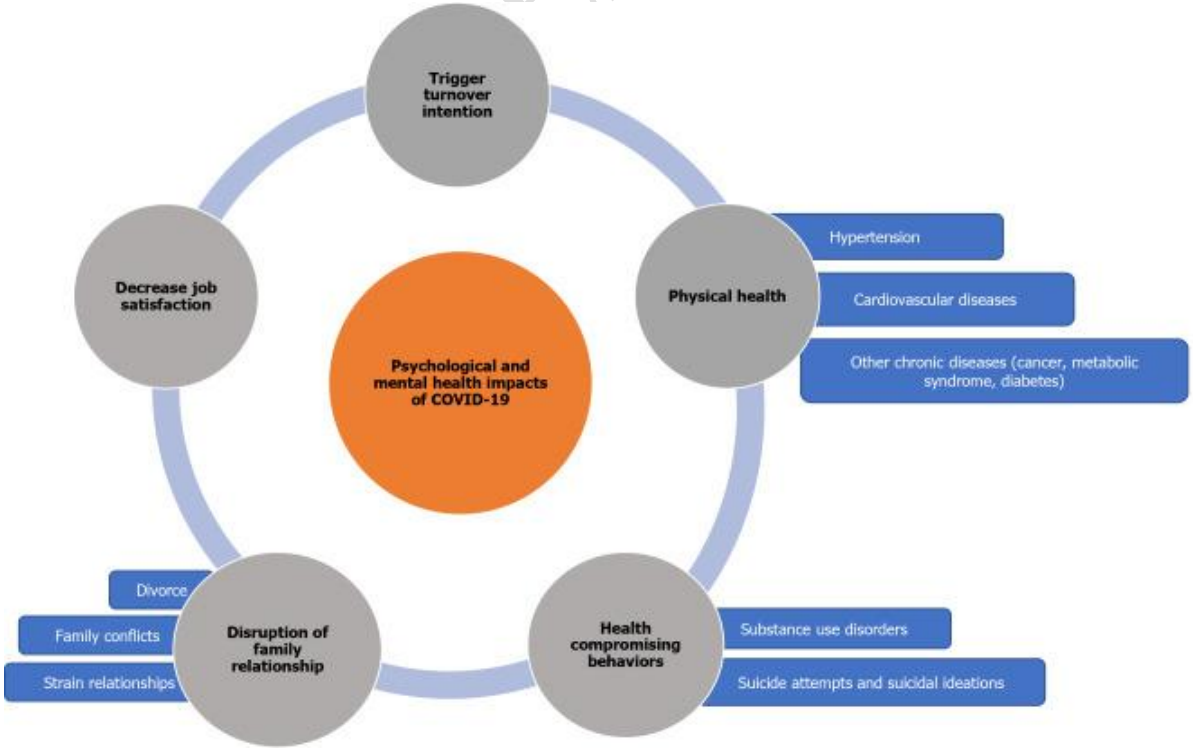
In the COVID-19 pandemic response, health workers had played an important role. It is commonly known that health workers have a high rate of pre-exising mntal health (MH) difficulties, which may have a negative effect on the quality of patient treatment. This group is at risk of developing worseningg MH during an outbreak, according to studies from previous infectious outbreaks. This groups are at high risk of poor Mental health as a direct effect of the COVID-19 pandemic, according to current statistics anaysing the psychological impact of the epidemic on similar individuals. Health workers are at a higher risk of acquiring mental health problems not just in the pandemics, but also later, further complicating the situation. There are various characteristics of the COVID-19 pandemic that may make it more likely to have an effect on the MH of Health workers. To begin with, the magnitude of the epidemic in terms of cases and countries affected has given everyone the impression that "no one iss safe." The media's attention on the number of deaths among Health workers and the spread of the disease within health and social care facilities has been persistent throughout the pandemic, possibly worsening the negative impact on Health workers mental health. Second, routine operations have been severely disrupted, with many staff being reassigned to higher-risk front-line positions and told to work outsied of their usual areas.(4)

Finally, the main attention on (PPE) is likely to have increased the effect of COVID-19 on the mental health of Health workers due to the unknown surroundin the quantity and quality of equipment, the frequently changing guidance on what PPE is approprite in specific clinical condition, and the uncertanty regarding the absolute risk of transmission posed.(5)

Discussion

This quick review article aims to give measurable evidence on the possibility of psychological consequences in HCWs dealing with pandemics, as well a identify risk and protectives factors. When it comes to the difficulties that HCWs are dealing with in the wake of the COVID-19 pandemic, "A high risk of infection and inadequate contamination protection," Kang et al. write, "as well as overwork, frustration, discrimination, isolation, patients with bad emotions and lack of touch with their families, and weariness." Based on the COVID-19 pandemic, the data presented here clearly reveals that dealing with such a situation has a psychologica impact on HCW responding to outbreaks.(6)

Health workers reported high rates of work-related stres (18.1–80.5%), post-traumatic strss symptoms (12–73.6%), depressed symptoms (26–50.1%), sleeplessness (35–36.2%), anxiety symptoms (45%), general psychiatric symptoms (18.3–76.3%), and severe anxiety symptoms (45%) during outbreaks (45 percent). 45 percent. The most commonly researched psychopathological impacts were anxiety and post-traumatic reactions, with data indicating a considerable incidence of such symptomatology among HCWs dealing with epidemic/pandemic outbreaks. These maladaptive reflexes, according to psychopathological findings, could last a long time. Post-traumatc and depressiv symptoms, as well as having psychological distress, were recorded six months to three years after the epidemic or pandemic breakout. (7)



(1)

Fig. 1. Psychological and mental health of COVID-19

Depression and Anxiety Symptoms

When compared to the SARS epidemic, the prevalence of depressed symptomatology among HCWs ranged from 27.5 to 50.7 percent during acute phase of the pandemic, with greater rats during the COVID-19 pandmic (50.4–50.7 percent) (27.6 percent).

DSM-IV criterea for sleeplessness were satisfied by 28.4 percent of nurses, with the standard SARS unit (50 percent) having the highest prevalence, followed byy the SARS critical care unit (23 percent), and non-SARS units having no cases. In 34–36.1 percent of COVID-19 HCWs, significant self-reported sleeplessness symptoms were found. Furthermore, medical professionals treating COVID-19 patients reported poor sleep quality. Anxiety levels influenced psychological well-being among the staff members of medicine treating COVID-19 patients, increasing distress and lowering the sleep quality and self-efficacy(8)

General Psychological Distress and Psychiatric Morbidity

Several studies have used screening action for psychiatric symptom and psychological distress, as well as general health condition surveys, to examine the mental health of HCWs.The General Health Questionnaire was used in studies to look at psychiatric symptoms during epidemics, and the results showed a wide variety of prevalence rates, ranging from 17.3 to 75.3 percent.(9)

After One month of SARS outbreak ending, 47.8% of hospital employees displayed psychological symptoms. Psychiatric problems were reported by 18.8% of HCWs six months following the SARS outbreak.

The occurence off fresh episodes of psychiatri illnesses (diagnosd with the SCID-I, excluding psychotics disorders and PTSD) among HCWs was 5.1% between 1.5 years following SARS resolution. Similarly, one yr after the conclusion of the SARS pandemic, 16.5% individuals surveyed still had major mental health issues. After controlling for age, sex, and education level, HCW survivors had a six-fold higher frequency of psychiatic symptoms 1 year after the end of the SARS outbreak than non-HCW survivor. (3)

Posttraumatc stress disorder (PTSD) and Posttraumatic Stres Symptoms Risk factors in HCWs facing the Covid-19 outbreaks

Fig. 2. Risk factors for COVID 19

Level of exposure

HCWs are those who work in health care. PTSS and PTS are most commonly caused by serving in high-risk wards or at first lines during COVID-19 outbreaks. The majority of study on the 2003 SARS outbreak indicated that 66 emergency room workers (21,7%) had higher rates of PTSD than 26 non-emergency room HCWs (i.e., psychiatric ward, 13 percent). Researchers discovered that those who had duty in high-risk settings and reported a high risk of SARS-related dangers had 3 to 4 fold higher PTSS rates, as well as an increased likelihood of eventual alcohol abuse/dependence, in a study of 550 health care workers in Beijing (China), including managment personnel. The latter was discovered to have a strong link to hyperarousal symptoms. According to a study of 145 nurse who had worked in MERs units during the outbreak, emergency HCWs exhibited high rates of PTSD than non-emergency HCWs.

Occupational role

Nurses have greater incidence of PTSS because they have more interaction with patients and are exposed to them for longer periods of time. A six-month study of 96 emergency HCWs done after the 2003 SARS pandemic found that nurses had a higher burden of PTSS than physicians.

Age and gender

Youth individual working as Health worker had a higher chance of developing PTSS. A recen research on COVID-19 indicated a high chance for female Health worker but an earlier study found a higher prevalence of PTSS among males in 1267 health care workers in a tertiary hospital hit by pandemics.

Marital status

Unmarried HCWs were seen more drastically affected than those who were married ones.

Quarantine, isolation and stigma

Approx 5% of HCWs has sufferd from acute stress disorder, of which quarantne being the most common reason, while a further 20% felt stigmatised and rejected in their communities as a result of their hospital work, with 9% indicating unwillingness to work or were thinking to quit their profession.

Previous psychiatric disorders

Patient with past history of mood disorders were on greater risk for having Posttraumatic Stress Symptoms .(4)

Action to support the mentl condition of HCWs during the CoV-2 pandemic Despite the fact that psychological illnesses are common among HCWs who work with a highly communicable disease, most of HCWs work in segregated wards and receive insufficient mental health training. As a result, in order to meet these duties, regular psychological counselling is required. These are some techniques for helping HCWs cope with their worry

and emotional pain. These strategies can be utilised to prevent future infectious disease outbreaks as well as the SARS-CoV-2 pandemic. (5-9)

Supportive measures:

This part includes the following objects: health workers are supported largely through a per support system that allocates professiona psychotherapy teams that pay attention to personnel views and diverse thoughts regarding issues regarding SARS-covid through a range of inputs and fedback channels. Knowing that their sick family members would receive prompt treatment and care, and that HCWs' infection at work would be treated as a job-related injury, offering emotional and psychological support, also online and face-to-face psychologicl crisis intervention (4) The following are the steps to takea): coping resource mobilisation, b) individual and group emotioal support facilitation, c) symptom prevention and early diagnosis, and d) early measures if symptoms are found.

Interventions in encouragement and motivation Managers and supervisor activating their perception of responsibility and purpose and awakening their soul of activity; encouraging health workers to engage in relaxation techniqes such as yoga, meditation, and other relaxations techniques; and helping in therapist visits, care for their psychological sufferingg and fruits. (4)

Interventions to keep you safe

Various preventative actions are also provided. This treatments include providing proper and good protective equipmet as well as meeting the physical needs of HCWs, such as access to nutritious food and drink as well as frequent rest intervals. Providing a safe environment for them to decompress while taking into account short working hours and rotatng shifts, particularly for who are in high-risk industries. Staff working in high-risk locations are supplied with housing and lodging.Childcare support should be provided to those who work rapid-cycle shifts and do not live near the hospital. Continue to analyse and monitor the physical and emotional health of the HCWs. Teamwork with standard operating procedures (SOP), which recognises weariness or psychological distress among staff by sending trained medical teams from areas with low number of patients.(10-14)

Interventions in education and training: Providing critical incident stress management, mindfulness traiing, assertiveness training, self-awarenes training, and protection training through online educational articles and videos; developing and publishing relevant guidelines books, handbooks, directives, and manuals documents;

Using podium of technology and online services

IT sector and internets services have been widel accepted in these crucial situations, where direct contact increases the danger of sickness transmission and quaranine is implented in many regions. The majority of SARS-CoV-2 pandemic support, educational, and psychological activities are now conducted over the internet and online tools. Telemedicine is also helpful in this situation. This technology can be used to reduce HCW work and allow them to spend more time caring for patients with acute diseases by eliminating unnecessary visits. Video conferencing platforms, hotlines/telepones, social media, and mobile phone all leverage this technology. Zoom and other video conferencing services can help with

counselling, education, and disease management. Counseling can also be done over the phone, over social media, or on mobile devices. There are psychological self-help tools available, as well as online psychological counselling.

Another technology that can be used in these scenarios is artificial intelligence. This technique could be used to detect people and medical personnel who are at risk of suicide or other emergenies.

For Organizatins Working in These Setting, Actions for bettermentof Mental condition of Health Professionalls During Complex Emergencies

• Recognize and address mental health disorders through standardising preventative, reporting, and referral procedures

• Provide first aid training to all expatriate and local staff, as well as peer counsellors.

• Hold a variety of events to increase the awareness for mental health issues, such as online course, workshop, and trainigs.

• Look for methods to improve (or expand) the existings health-care or public-service sector in your community.

• Community-based training and intervention should be considered by both regional and international staffs.

• start research and studies to help to determine the magnitude of the problem and provide acceptable remedies.
• Adapt and utilise the resources and approaches that you have at your disposal.
• Improving the information sharing and communication regarding mental health and well-being between organisations.

• Create complete and closely monitored peer support procedures to enable low-thresold contact points for affected employees.

• Implement design-thiking methodologies to better integrate individual perspctives with organisational structure and boost organisational responsiveness, flexibility, and adaptability. (5)

CONCLUSION:

According to Chong et al., the SARS-2 pandemic can be classified as a bio-disaser (2004). Even though new infectious illness outbreaks are common, medical experts respond quickly. Thousands of HCWs should be on the front lines during outbreaks to tackle the illness. A high number of medical staff, according to the findings of this investigation, suffer from mental illnesses. Right now, we're between the midst of a pandemic. It is very important to

address the Mental well-being of HCWs and to discover strategies for improving their mental health. Our findings suggest that HCWs working in epidemic/pandemic response situations are dealing with a variety of mental problem and psycological issues. these repercussions are particularl worrisome due to their prolong nature and potential relation to impaired decision-making ability. While rapid and timely depoyment is vital in addressing epidemic/pandemic outbreaks, we cannot avoid exposing Health worker to critical conditions that may be harmful to their mental health. Failure to recognise the detrimental psychological impact on these professionals, on the other hand, will have repercussions at both the individual and systemic levels of healthcare response capacity. The findings revealed that a significant number of health personnel were subjected to COVID-19-related stigma. All psychoogical outcomes among health workers were strongly influenced by stigma among health workers, who are at high risk of infection due to greater exposures, could interfere with their ability to focus on their task. It is so vital to boost the morle of stigmatisd health worker who are afraid of becoming sick or infecting peoples. Mainly, the causes and facilitators of stigma in health care employees must be comprehended in order to build an effective response, which may include lengthy treatments.

REFRENCES:

1. Gupta S, Sahoo S. Pandemic and mental health of the front-line healthcare workers: a review and implications in the Indian context amidst COVID-19. Gen Psychiatry. 2020 Oct;33(5):e100284.

2. Lange KW. Coronavirus disease 2019 (COVID-19) and global mental health. Glob Health J Amst Neth. 2021 Mar;5(1):31–6.

3. Vizheh M, Qorbani M, Arzaghi SM, Muhidin S, Javanmard Z, Esmaeili M. The mental health of healthcare workers in the COVID-19 pandemic: A systematic review. J Diabetes Metab Disord. 2020 Oct 26;19(2):1967–78.

4. Preti E, Di Mattei V, Perego G, Ferrari F, Mazzetti M, Taranto P, et al. The Psychological Impact of Epidemic and Pandemic Outbreaks on Healthcare Workers: Rapid Review of the Evidence. Curr Psychiatry Rep. 2020;22(8):43.

5. Carmassi C, Foghi C, Dell'Oste V, Cordone A, Bertelloni CA, Bui E, et al. PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic. Psychiatry Res. 2020 Oct;292:113312.

6. Jiménez-Giménez M, Sánchez-Escribano A, Figuero-Oltra MM, Bonilla-Rodríguez J, García-Sánchez B, Rojo-Tejero N, et al. Taking Care of Those Who Care: Attending Psychological Needs of Health Workers in a Hospital in Madrid (Spain) During the COVID-19 Pandemic. Curr Psychiatry Rep. 2021;23(7):44.

7. Vizheh M, Qorbani M, Arzaghi SM, Muhidin S, Javanmard Z, Esmaeili M. The mental health of healthcare workers in the COVID-19 pandemic: A systematic review. J Diabetes Metab Disord. 2020 Oct 26;19(2):1967–78.

8. Pratik Khanal, Navin Devkota,Minakshi Dahal, Kiran Paudel & Devavrat Joshi . Mental health impacts among health workers during COVID-19 in a low resource setting: a cross-sectional survey from Nepal

9. Mary Surya,[a] Dilshad Jaff,[b] Barbara Stilwell,[c] and Johanna Schubert[b] .The Importance of Mental Well-Being for Health Professionals During Complex Emergencies: It Is Time We Take It Seriously

10. Acharya, Sourya, Samarth Shukla, and Neema Acharya. “Gospels of a Pandemic- A Metaphysical Commentary on the Current COVID-19 Crisis.” JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH 14, no. 6 (June 2020): OA01–2. https://doi.org/10.7860/JCDR/2020/44627.13774.
11. Arora, Devamsh, Muskan Sharma, Sourya Acharya, Samarth Shukla, and Neema Acharya. “India in ‘Flattening the Curve’ of COVID-19 Pandemic - Triumphs and Challenges Thereof.” JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, no. 43 (October 26, 2020): 3252–55. https://doi.org/10.14260/jemds/2020/713.
12. Bawiskar, Nipun, Amol Andhale, Vidyashree Hulkoti, Sourya Acharya, and Samarth Shukla. “Haematological Manifestations of Covid-19 and Emerging Immunohaematological Therapeutic Strategies.” JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, no. 46 (November 16, 2020): 3489–94. https://doi.org/10.14260/jemds/2020/763.
13. Burhani, Tasneem Sajjad, and Waqar M. Naqvi. “Telehealth - A Boon in the Time of COVID 19 Outbreak.” JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, no. 29 (July 20, 2020): 2081–84. https://doi.org/10.14260/jemds/2020/454.

14. Butola, Lata Kanyal, Ranjit Ambad, Prakash Keshaorao Kute, Roshan Kumar Jha, and Amol Dattaroa Shinde. “The Pandemic of 21st Century - COVID-19.” JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, no. 39 (September 28, 2020): 2913–18. https://doi.org/10.14260/jemds/2020/637