

Mini Review

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# Psychological impact of the pandemic of covid-19

#### Abstract

The pandemic of covid -19, caused by the Severe Acute Respiratory Syndrome Corona Virus 2(SARS-CoV-2) is not just a grave physical health crisis but it has caused significant mental health issues as well. The aim of this paper is to assess the psychological impact of the pandemic of COVID-19. In order to reduce the community transmission of the disease, countries across the world imposed lockdowns, schools were closed, infected people were isolated and other strict measures were taken to ensure social and physical distancing. These measures induced stress, anxiety tension and depression in communities. As a result lot of people developed depression, mood alterations, irritability, insomnia, posttraumatic stress disorder and emotional exhaustion. A number of mental health supporting strategies need to be adopted to reduce the psychological support in form of tele psychotherapy, keeping away from mis- information, engaging in physical activity, chanting, yoga and meditation etc. Vulnerable population such as elderly people especially those who are staying alone and those already suffering from preexisting mental disorder should have access to psychologists.

**Keywords:** severe acute respiratory syndrome corona virus 2(SARS-CoV-2), mental health, posttraumatic stress disorder

Volume 12 Issue 2 - 2023

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Received: February 21, 2022 | Published: June 07, 2023

# Introduction

On 29th of December, 2019, few cases of Pneumonia of unknown etiology were reported in the city of Wuhan in Hubei, province of China. The researches in China later identified the etiological agent to be a new Corona Virus and it was initially named 2019-nCoV. Later on, International Committee on Taxonomy of virus (ICTV) renamed it as Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2).<sup>1</sup> It is the third highly pathogenic virus after SARS-CoV-1 which had caused SARS outbreak in 2002-2003 and MERS-CoV which had caused Middle East Respiratory Syndrome in 2012-2013. On 12th March, 2020, WHO declared this COVID-19 outbreak to be a pandemic. Since then, it has affected more than 200 nations across the globe causing both physical and mental health crisis. Several psychological consequences like depression, stress, anxiety, PTSD, drug abuse, alcohol use, have emerged as a result of uncertain and chaotic circumstances created by the Pandemic of COVID-19.2 Apart from restrictions of social activities due to quarantine and lock down, the anxiety provoking misinformation and over information provided by the social media kindled the feelings of hopelessness, helplessness, desperation, which lead to psychological ill health of both the general population and front-line health care workers. Those subjected to confinement due to quarantine experienced elevated levels of anxiety which was precipitated by frustration, boredom and distress. Sometimes unbearable anger and hopelessness drives individuals to take extreme steps like committing suicides. Although the World Health Organization has declared the end of Covid-19 as a pandemic, it still poses a psychological burden to many who have experienced the lockdown and possibly the loss of some loved ones. The aim of this paper is to assess the psychological impact of the pandemic of COVID-19.

### Pandemics and mental health

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One of the greatest catastrophes which have affected mankind is the outbreak of a pandemic. Pandemics not only cause pain, suffering and death but they also cause economic damage social disruption and mental agony. All major pandemics have affected mental and psychological health of human beings. Dr Henry Holland, an eminent British doctor wrote in 1839 something about the mental health effects of the flu on people and I want to quote his writing, "of featured impairments of mental functions almost in the same ratio of the body ..... and that the behavioral alterations were not comparable to those secondary to other fevers".2 The Spanish flu pandemic was the first pandemic that occurred in the setting of modern medicine and so the long term impact of this pandemic was meticulously quantified and extensively studied. A study from United States of America census data carried out between 1960 and 1980 documented that the children who were born to women during the pandemic had more physical ailments and a lower lifetime income than those who were born a few months earlier or later. A study published in the Journal of Political Economy in the year 2006 found that "cohorts in utero during the course of pandemic showed reduced intelligence quotient and increased rates of physical disability compared with other birth cohorts".3 The mental health effects of the pandemic of COVID -19 are illustrated in the Figure 1 and include anxiety, stress, depression, insomnia.





MOJ Women's Health. 2023;12(2):27-29.



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#### Psychological impact on health professionals

The COVID-19 Pandemic created mental health crisis not only for the patients but also for the front-line health professionals. The long and continuous working hours due to ever increasing number of cases had put them on tremendous work pressure along with the mental trauma of witnessing death of a large number of their patients. All these issues predispose them to physician burn out. An online survey conducted in China discovered that Physicians involved in care of patients with COVID-19 were more prone to develop anxiety, depression, insomnia, post-traumatic stress disorder. Separation from families and subsequent loneliness was one of the important factors for adverse mental health outcomes.<sup>4</sup> In order to develop intervention to alleviate the psychological stress of the health care providers, we need to understand the psychological suffering of a medical care worker.

A study done in Italy reported muscle tension among 48.4% and stomach upset among 37.3% of the health care professionals dealing with covid -19 patients.<sup>5</sup> Frontline healthcare providers (HCPs) are the ones who are more prone to develop psychological symptoms during a pandemic and therefore they should be offered mental health interventions to improve their psychological and mental status. The existing health care system should be reviewed in such a manner that the health care professionals are provided with psychological support in form of tele-counselling and tele-psychotherapy.<sup>6</sup> Psychological care must be made available to everyone including the health care providers for smooth functioning of health care system even in an overwhelming crisis like that of COVID-19. Hospital administration should ensure that stress of Health care provider has to be released at all costs. Therefore, all those rendering care to COVID-19 patients should be monitored for their emotional reactions and Psychological support to be offered to those who are not able to cope with anxiety and depression due to COVID-19.

## Psychological impact on general population

The pandemic of covid 19 saw widespread isolation in form of lockdown and created fear and panic in general population because of its rapid transmission and high morbidity. People already under severe stress, when forced to stay in isolation may exhibit various symptoms of psychological ill health like anger, irritability, and emotional exhaustion. Lockdown and subsequent isolation also precipitated preexisting psychiatric disorders such as depression, anxiety psychosis and suicidal tendencies (Table 1).

 Table I Psychological stressors during the pandemic of COVID-19

Misinformation on social media
Lack of resources
Work from home
Social distancing
Fear of Death

The general public was gripped by the fear of losing their relative or a near and dear one to COVID -19 and this lead to an increase in number of cases of anxiety, panic, insomnia and depression.

#### COVID-19 and post-traumatic stress disorder

The resurgence of traumatic memories long after the actual traumatic event is over leads to the development of a mental disorder called post traumatic stress disorder. There seems to be a close link between inflammation and PTSD. Subjects with PTSD have shown a marked increase in cytokines like IL-6, TNF- $\alpha$ , IL-1 $\beta$  and IL-10.<sup>7</sup>

PTDS usually occurs in those suffering from co morbid conditions like with depression, anxiety, insomnia and drug abuse. This cohort of patients also has a high likelihood of committing suicide. PTSD is a common occurrence in those who have themselves suffered from COVID -19 or witnessed the agony of their loved ones dying from it. COVID -19 is characterized by profound systemic inflammation along with neuronal invasion by the virus and is also associated with unprecedented emotional turmoil and stress.<sup>8</sup> All the factors predispose these patients to develop mental and psychological disorders like PTSD.

#### **Preventive strategies**

Psychological First Aid should be offered to address excessive fear about the illness and also to fight social stigma and discrimination. All negative emotions in all beings need to be addressed by Psychological support. The psychological impact of the pandemic needs urgent attention in order to reduce the burden of subsequent mental disorders.<sup>9</sup> The fear and anxiety generated by the pandemic needs to be mitigated effectively. Following strategies will help communities and nations to cope up with the panic created by COVID-19 pandemic:<sup>10</sup>

- I. Providing online psychological telecounselling.
- II. Providing true and accurate information to the general public. Avoid spreading misinformation and rumors.
- III. Providing suggestions for stress management. Various coping techniques include Yoga, meditation, indulging in activities, adhering to some routine even in lockdown and work from home.
- IV. Focus on dissemination of hopeful stories of all those who recovered from the disease rather than focusing on those who lost their life to it.
- V. Regular psychological screening should be done for those suffering from mental health issues like anxiety, depression, panic attacks.
- VI. Prophylactic drugs such as ivermectin may be used to prevent infection with covid -19 and thereby reducing the physical mortality and mental morbidity.<sup>11</sup>

# Conclusion

Pandemics are not only associated with death, destruction and devastation, they are also associated with long-term mental and psychological consequences. The psychologist should work closely with the clinicians, the public health specialists and community workers, to provide care to those suffering from mental ill health. Psychological first aid and mental health care should be incorporated in the national disaster management protocols including biological disease outbreaks. It is of paramount importance to develop strategies to tackle and address psychological and mental health issues cropping up during a crisis like the one, we are presently going through. The health care providers have to play the dual role of providing medical care to the actually ill and also providing psychological support to the patients, their relatives and fellow workers.

## Acknowledgements

None.

# **Conflicts of interest**

The authors have no conflicts of interest with this work.

# **Authors' contributions**

Conception and design: RA, HA,

Drafting of the article: RA, HA,

Critical revision of the article: RA, HA.

# Funding

None.

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