# **Mental Health during Covid-19 Pandemic**

Kirti Kushwah Inderprastha Engineering College Engineering College Engineering College Engineering College Engineering College Delhi, India

Swati Gupta Inderprastha Uttar Pradesh, India Uttar Pradesh, India

Vishal Inderprastha

Yash Jain Inderprastha Delhi, India

Yash Srivastava Inderprastha Uttar Pradesh, India

### ABSTRACT

The COVID-19 virus has had a significant impact on mental health, including anxiety, depression and post-traumatic stress disorder. This literature review aims to investigate the impact of pandemics on mental health and identify effective interventions to meet mental health needs during the pandemic. Many studies have revealed that the epidemic negatively affects mental health. Xiong et al. (2020) found that the prevalence of anxiety and depression among the population in China increased significantly during the COVID-19 epidemic compared to before the epidemic. Similarly, Wang et al. (2020) found that the pandemic had a significant impact on mental health, including post-traumatic stress disorder, depression, and anxiety. However, some studies have also shown positive results such as increased strength and subsequent growth (Mehta et al., 2020; Asmundson and Taylor, 2020). Current interventions to address the psychological impact of the epidemic are effective in improving mental health. Online support groups can be effective in providing social support, which is important for mental health. Although these interventions are useful, many difficulties have been encountered in implementation. Not everyone has access to the tools needed for online intervention, and some people may be reluctant to seek mental health treatment online. Additionally, the lack of mental health professionals and resources in some areas may hinder access to mental health services. Future research should focus on the development and evaluation of interventions that address the mental health needs of vulnerable groups, such as care workers, healthy people, the elderly, and people with pre-existing mental health conditions. In addition to traditional interventions, technology can play an important role in accessing mental health services. Digital interventions, such as mobile apps and teletherapy, can provide personalized mental health care while reducing the risk of infection.

### Keywords

Covid-19 pandemic, health effects, anxiety, depression, posttraumatic stress disorder (PTSD), literature review, positive impact, expansion, resilience, mental health, online support group, social interaction.

# 1. INTRODUCTION

The COVID-19 virus has a significant impact on all aspects of daily life, including physical health, social services and safety, and financial security. But one of the biggest impacts of the pandemic has been mental health; Anxiety, depression, and post-traumatic stress disorder are on the rise worldwide. The global pandemic has caused fear, uncertainty, and social isolation, causing mental health problems worldwide; Therefore, it is important to investigate its impact on mental health and identify effective interventions to meet the needs of people affected by mental illness. health needs.

Many studies have confirmed that the COVID-19 pandemic has had a negative impact on mental health outcomes, with the majority of mental illnesses occurring more in countries and regions where the disease is more prevalent. For example, a study conducted in China revealed that the prevalence of anxiety and depression in society during the Covid-19 epidemic was higher than before the epidemic. The pandemic has also exacerbated existing mental health issues, causing further stress for those affected.

Although the negative effects of exposure to mental illness are well known, some studies have also shown positive effects such as healing and growth following exposure to pain. These findings suggest that the pandemic offers opportunities for growth and adaptation. Therefore, it is important to find effective interventions to address the psychological needs of those affected by the epidemic.

Some interventions are effective in improving mental health, including online support groups, teletherapy, and self-care strategies. For example, online support groups encourage social interaction, while teleconferences provide personalized psychotherapy while reducing the risk of infection. Self-care techniques, such as mindfulness and breathing techniques, are also effective in promoting relaxation and reducing stress.

Although effective, the implementation of these interventions still faces challenges such as limited technology, a lack of mental health professionals, and limited resources in some areas. In order to meet the psychological needs of people affected by the epidemic, it is important to identify and solve these problems and implement interventions applicable to everyone.

This literature review aims to investigate the impact of the COVID-19 pandemic on mental health outcomes and identify effective interventions to meet these needs of people affected by the epidemic. The review will focus on studies investigating the prevalence of mental illness during the pandemic, factors affecting mental illness, and interventions to improve mental health. Additionally, challenges in implementing these interventions will be examined and areas for future research will be identified.

Overall, this literature review highlights the need to prioritize mental health services during and after the COVID-19 pandemic. While the review identifies effective interventions to meet the mental health needs of individuals affected by the epidemic, it also highlights challenges in implementing these interventions. Future research should focus on developing new interventions to meet the psychological needs of those affected by the epidemic, with a particular focus on reducing interventions and increasing mental health resources.

# 2. BACKGROUND

Health and social care workers (HSCWs) continue to play a vital role in our response to the COVID-19 pandemic. It is known that HSCWs exhibit high rates of pre-existing mental health (MH) disorders which can negatively impact on the quality of patient care.

Studies from previous infectious outbreaks suggest that this group may be at risk of experiencing worsening MH during an outbreak. Current evidence examining the psychological impact on similar groups, suggest that this group may be at risk of experiencing poor MH as a direct result of the COVID-19 pandemic. Compounding the concerns about these data are that HSCWs will be likely to not only be at a higher risk for experiencing MH problems during the pandemic, but also in its aftermath.

There are some specific features of the COVID-19 pandemic that may specifically heighten its potential to impact on the MH of HSCWs.

Firstly, the scale of the pandemic in terms of cases and the number of countries affected has left all with an impression that 'no one is safe'. Media reporting of the pandemic has repeatedly focused on the number of deaths in HSCWs and the spread of the disease within health and social care facilities which is likely to have amplified the negative effects on the MH of HSCWs.

Secondly, usual practice has been significantly disrupted and many staff have been asked to work outside of their usual workplace and have been redeployed to higher risk front line jobs.

Finally, the intense focus on personal protective equipment (PPE) is likely to have specifically heightened the impact of COVID19 on the MH of HSCWs due to the uncertainty surrounding the quantity and quality of equipment, the frequently changing guidance on what PPE is appropriate in specific clinical situations and the uncertainty regarding the absolute risk of transmission posed. While other workers will have been impacted by COVID-19, it is highly likely that the above factors will have disproportionately affected the MH of HSCWs [9, 10]. Indeed, a British Medical Association survey on the 14th May 2020 during the pandemic showed that 45% of UK doctors are suffering from depression, anxiety, stress, burnout or other mental health conditions relating to, or made worse by, the COVID-19 crisis.

Although evidence based psychological interventions are available for this population, there is a paucity of evidence about interventions for the MH of HSCWs during pandemics. Recent calls to action mandated the need to provide high quality data on the psychological impacts of the COVID-19 pandemic. This pandemic has rapidly changed the functioning of society at many levels which suggests that these data are not only needed swiftly, but also with caution and scientific rigour.

These data are needed in order to equip HSCWs to do their job effectively – high levels of stress and anxiety have been shown to decrease staff morale, increase absenteeism, lower levels of work satisfaction and quality of care. It is therefore a priority to understand the psychological needs of our HSCWs in order to provide them with the appropriate tools to mitigate the negative effects of dealing with the COVID-19 pandemic.

# 3. AIM OF THE REVIEW

The aim of this review is to identify the psychological impact of the COVID-19 pandemic on the health and social care professions, more specifically to identify which sub-groups are most vulnerable to psychological distress and to identify the risk and protective factors associated with this population's mental health.

This review, looking exclusively at the psychological impact of the COVID-19 pandemic on HSCWs will therefore contribute to informing where mental health interventions, together with organisational and systemic efforts to support this population's mental health could be focussed in an effort to support our well-being. Rapid but robust gathering of evidence to inform health decision-makers is vital and in circumstances such as these, the WHO recommends rapid reviews.

### 4. IMPACT OF PANDEMIC OVER MENTAL HEALTH

The COVID-19 pandemic has resulted in various stressors that have negatively impacted mental health outcomes. The pandemic has disrupted daily routines, limited social interactions, and caused financial stress, leading to increased anxiety and depression. Additionally, the fear of contracting the virus, uncertainty about the future, and the loss of loved ones have resulted in posttraumatic stress disorder and complicated grief. These stressors have had a disproportionate impact on vulnerable populations, including healthcare workers, older adults, and individuals with pre-existing mental health conditions. For individuals with pre-existing mental health conditions, COVID-19 may exacerbate symptoms, making it harder to cope with day-today life. Lockdown restrictions, isolation, and working from home have eliminated or reduced many social outlets and coping mechanisms, leading to a rise in loneliness and feelings of isolation [8].

Solutions to mitigate the impact of COVID-19 on mental health has become a focus on mental health care centres, with many adopting teletherapy and virtual mental health sessions through video conferencing. Additionally, encouraging exercise, a healthy diet, and regular sleep patterns can help alleviate stress and anxiety.

Furthermore, the pandemic has also had a significant impact on the mental health of children and adolescents. School closures and the shift to online learning have disrupted the normal routines of children and adolescents, leading to feelings of isolation and disconnection from peers and teachers. Furthermore, the pandemic's economic impact has led to increased financial stress in families, leading to parental depression and anxiety, which can affect children's mental health outcomes (Sprang & Silman, 2020).

The pandemic has also led to increased domestic violence and child abuse, further exacerbating mental health concerns. Ouarantine measures have increased the risk of violence in the home, with victims of abuse experiencing higher rates of depression, anxiety, and PTSD (Peterman et al., 2020). Children who are exposed to violence are also at an increased risk of developing mental health problems, such as anxiety, depression, and behavioural problems (Pfefferbaum & North, 2020). The pandemic's impact on mental health is not limited to individuals directly affected by the virus. The pandemic's economic impact has led to increased unemployment and financial insecurity, which are major risk factors for poor mental health outcomes. Additionally, the pandemic has led to increased social unrest and political polarization, leading to feelings of anxiety, helplessness, and hopelessness (Kosidou et al., 2021).

In conclusion, the COVID-19 pandemic has had a significant impact on mental health outcomes, affecting individuals of all ages and backgrounds. The pandemic's disruption of daily routines along with limited social interactions, and financial stress has led to increased anxiety, depression, and PTSD. Effective solutions to mitigate the impact of COVID-19 on mental health include teletherapy and virtual mental health sessions, exercise, healthy diet, and regular sleep patterns. It is also essential to address the impact of the pandemic on vulnerable populations, including children and adolescents, victims of domestic violence and child abuse, and those affected by the pandemic's economic impact.

# 5. CHANGE IN MENTAL HEALTH SYMPTOMS

All studies assessed covid-19 symptoms during at least one time point in 2020, which in most cases was in the first half of the year. Only three studies assessed symptoms in the first months of the pandemic (March to June 2020) and again in late 2020 (September to November), and only one reported results from 2021.

Many analyses showed substantial heterogeneity, which suggests that point estimates should be interpreted cautiously. Consistency did, however, exist across analyses in that most estimates of symptom changes were close to zero and not statistically significant, and changes that were identified were of minimal to small magnitudes. Among general population studies, we did not find changes in general mental health or anxiety symptoms, and the worsening of depression symptoms was minimal.

Among subgroups, women or female participants were the only group that experienced a worsening of symptoms across outcome domains; all by small amounts. Depression symptoms worsened by minimal to small amounts for older adults, university students, and people who self-identified as belonging to a sexual or gender minority group, but not for other groups. Although based on small numbers of studies and participants, general mental health and anxiety symptoms were shown to worsen for parents. General mental health and depression symptoms were shown to improve for people with pre-existing mental health conditions, but these findings were based on only two studies for general mental health, and improvement was negligible even though statistically significant for depression symptoms.

# 6. COMPARISON WITH OTHER STUDIES

Our finding that mental health was either unchanged or worsened by minimal to small amounts in the general population and subgroups is consistent with results from a more limited systematic review of 65 longitudinal studies from early in the pandemic [13] and somewhat smaller than a second systematic review of 43 studies.14 We know of only one study that has evaluated mental disorders using validated diagnostic methods. That study, from Norway,27 which was not eligible for our review, evaluated prevalence of current mental disorders in a series of cross-sectional random samples collected from 28 January to 11 March 2020, 12 March to 31 May 2020). The authors concluded that the prevalence of mental health disorders was stable or slightly decreased across the pandemic.

The largest study on suicide during the pandemic included monthly data from official government sources on suicide occurrences from 21 countries from 1 January 2019 or earlier to 31 July 2020 and found no evidence of a statistically significant increase in any country or region; statistically significant decreases did, however, occur in 12 countries or regions.28 Results were similar in a subsequent update with data from 33 countries across the first nine to 15 months of the pandemic.29

We found that women or female participants experienced small negative changes, in aggregate, for general mental health, anxiety symptoms, and depression symptoms during the early part of the pandemic. This finding is consistent with a previous analysis of a subset of studies from the present review with direct within study comparisons between mental health of women or female participants and men or male participants. That study found statistically significantly, albeit minimally greater, worsening of general mental health and anxiety symptoms among women than among men; changes in depressive symptoms were worse but not statistically significant for women.

Significant worsening of symptoms among women or female members of the population is of concern. This is an aggregate result that, even though small, suggests that the disproportionate effect of the pandemic on women or female members of the population has influenced mental health. In terms of vulnerabilities, most single parent families tend to be headed by women, and women earn less and are more likely to live in poverty than men. Women are also overrepresented in healthcare jobs and provide most family and elder care. Intimate partner violence towards women increased during the pandemic. The small overall change in mental health symptoms suggests that many women have been resilient but that among some an important worsening of symptoms occurred. Indeed, although most of our analyses found no changes or minimal to small negative changes in mental health, they do suggest that the pandemic negatively influenced the mental health of some people, which is consistent with, for example, reports of increased visits for mental health.

Nonetheless, the patterns of findings from our review, along with evidence on mental health disorders and suicide, converge to suggest that the effects of covid-19 on mental health are more nuanced than the "tsunami" descriptor or other similar terms used by some investigators and in many media articles.12 Short news cycles that emphasise bad news, anecdotes, and an uncritical reliance on cross sectional studies and unvalidated, difficult-to-interpret survey tools that inquire about mental health and wellbeing during the pandemic among convenience samples might at least partially explain this discrepancy. Illustrating the pitfalls of interpreting studies that ask questions about emotional reactions to covid-19, separate from mental health, a longitudinal study of 2345 young men from Switzerland found that depression symptoms and stress significantly decreased during covid-19 compared with prepandemic levels.41 The study also reported results from a series of unvalidated single items, administered only during the pandemic, that queried about emotional reactions to the pandemic and specifically assigned covid-19 as the cause (eg, "due to covid-19, I experienced . . ."); these items suggested high levels of distress, which became the focus of the study's conclusions without mention of unchanged mental health indices. Together with the findings from our systematic review, this suggests that many or most people have experienced different aspects of covid-19 as highly unpleasant or distressing, that most people have been resilient, and that population level mental health has not changed by large amounts, although for some it has changed negatively.

# 7. EXISTING INVENTIONS

In response to the mental health impact of the pandemic, various interventions have been done to alleviate psychological distress. These interventions include online support groups, teletherapy sessions with licensed mental health professionals, and self-care strategies such as mindfulness and breathing exercises. Online interventions have the advantage of providing accessible and cost-effective mental health care while maintaining social distancing guidelines. Teletherapy sessions provide an opportunity for individuals to receive personalized mental health care while minimizing exposure to the virus. Additionally, self-care strategies have been effective in promoting mental wellbeing by encouraging individuals to engage in activities that promote relaxation and stress reduction.

# 8. FUTURE DIRECTIONS

Despite the existing interventions, the mental health impact of the pandemic remains significant, highlighting the need for continued research and interventions. Future research should focus on developing and evaluating the effectiveness of interventions that address the mental health needs of vulnerable populations. Additionally, future interventions should address the underlying social determinants of mental health, including poverty, social isolation, and discrimination. Furthermore, interventions should incorporate technology to increase accessibility to mental health care and address the disparities in mental health care access.

# 9. THE PANDEMIC IS AFFECTING DIFFERENT GROUPS IN SPECIFIC WAYS

- Women: In general, studies report many women sufferings from anxiety and depression; this may be due to them facing the brunt of increased household responsibilities and domestic violence during the lockdown.
- Children: After speaking with 1,102 parents and primary caregivers, it was found that more than 50 percent of children had experienced agitation and anxiety during the lockdown. Media reports indicate that they may be experiencing fears about the virus, worries over access to online classes, and stress and irritability from being unable to go out. Many have faced violence in their homes or have been victims of cyber bullying.
- Young people: One survey reported that 65 percent of nearly 6,000 youth aged 18-32 years felt lonely during the lockdown, and 37 percent felt that their mental health had been 'strongly impacted'. This is not surprising given that twenty-seven million young people lost their jobs in April 2020 alone, and 320 million students have been affected by the closing of educational institutions, and the postponement of exams.
- **Migrant workers and daily wage labourers:** Although there are no studies specifically with migrant workers, panic reactions have been observed in the millions who lost their livelihood and made desperate attempts to return to their rural homes. Daily wage laborers have also been heavily affected; a study of 1,200 auto drivers found that 75 percent were anxious about their work and finances.
- **Doctors and frontline workers**: A survey with 152 doctors found that more than a third of them are experiencing depression and anxiety due to the

pandemic. Frontline workers are reportedly burdened by over-work, and anxious about contracting the virus.

- Sexual minority groups: A study of 282 people reported higher anxiety among sexual minority groups, and called for the attention of policymakers to take sensitive and inclusive health decisions for marginalised communities.
- People with pre-existing mental health conditions: The anxieties described earlier have been overwhelming for people with pre-existing mental health conditions. Problems may also have worsened for individuals because of the disruption of mental health services and the difficulty of travel, which led to people reducing doses of prescribed medication.
- **People with substance use disorders**: The sudden closure of all liquor shops in the country and the cutting off drug supplies has resulted in withdrawal symptoms in many people with alcohol and substance use dependence, for example, delirium and seizures. Many alcohol 'addicts' distressed by their craving have also consumed poisonous substances such as hand sanitisers as substitutes and died, or died by suicide.

### 10. IMPACT OF COVID-19 ON FAMILY AND ECONOMY

The COVID-19 pandemic is more than a global health crisis. In 2020, the pandemic placed nearly half of the 3.3 billion global workforces at risk of losing their livelihoods (World Health Organization [WHO], 2020). Compared to fourth quarter 2019, global working hours lost in 2020 topped 8.8%, the equivalent of 255 million full-time jobs (International Labour Organization [ILO], 2021). As businesses shuttered in the US, the unemployment rate jumped to the highest recorded month-to-month change (10% in April 2020), bringing the national rate to 15% (Bureau of Labor Statistics, 2022). At the household level, COVID-19 related restrictions impacted nearly every aspect of daily life, negatively affecting the psychological-wellbeing of individuals worldwide (Ammar et al., 2020). In this report, we provide a brief review of the current literature examining the impact of COVID-19 disruption on family functioning and economic well-being as a context for this special issue. Because evidence from past economic crises suggests that the effects on families are not distributed evenly or experienced in the same way, we summarized the literature on the impact of COVID-19 on three aspects of family functioning: (a) reallocation of intrafamilial tasks; (b) sociodemographic disparities in COVID-19 impact; and (c) financial stress and family relationships.

### **11. DISCUSSIONS**

The existing research on mental health during the COVID-19 pandemic highlights the significant impact of the pandemic on mental health outcomes. The stressors associated with the pandemic, including social isolation, financial stress, and fear of the virus, have resulted in increased rates of anxiety, depression, and post-traumatic stress disorder. Vulnerable populations, including healthcare workers and individuals with pre-existing mental health conditions, have been particularly affected by the pandemic's mental health impact. Existing interventions, including online support groups, teletherapy, and selfcare strategies, have been effective in addressing the mental health impact of the pandemic. However, disparities in mental health care access and utilization persist, particularly among vulnerable populations. Future interventions should address the underlying social determinants of mental health, incorporate technology to increase accessibility to mental health care, and develop and evaluate interventions that address the mental health needs of vulnerable populations.

Furthermore, the impact of the COVID-19 pandemic on mental health may persist beyond the immediate crisis, with long-term consequences for individuals, families, and communities. Ongoing research is needed to understand the long-term effects of the pandemic on mental health outcomes and to identify effective interventions to mitigate these effects. It is also important to note that the COVID-19 pandemic has brought attention to pre-existing weaknesses in the mental health care system, including inadequate resources, lack of access to care, and stigma surrounding mental health. The pandemic has underscored the need for increased investment in mental health care and for addressing the root causes of mental health disparities.

In conclusion, the COVID-19 pandemic has had a profound impact on mental health outcomes, highlighting the need for continued research, investment, and innovation in mental health care. By addressing the mental health needs of individuals and communities affected by the pandemic, we can promote resilience, well-being, and recovery in the face of this global crisis.

# **12. CONCLUSION**

In conclusion, the COVID-19 pandemic has had a significant impact on mental health outcomes, including anxiety, depression, and post-traumatic stress disorder. However, the pandemic has also resulted in positive outcomes, such as increased resilience and post-traumatic growth. To address the mental health needs of individuals affected by the pandemic, interventions such as online support groups, teletherapy, and self-care strategies have been effective in promoting psychological well-being. However, challenges such as lack of access to technology and mental health care resources have hindered the implementation of these interventions.

Future research should focus on developing and evaluating interventions that address the mental health needs of vulnerable populations, such as healthcare workers, older adults, and individuals with pre-existing mental health conditions. These interventions should address the underlying social determinants of mental health and promote social connectedness, inclusion, and equity.

In addition to traditional interventions, technology can play a crucial role in increasing accessibility to mental health care. Digital interventions such as mobile apps and teletherapy can provide personalized mental health care while minimizing exposure to the virus.

Overall, addressing the mental health impact of the COVID-19 pandemic is crucial for promoting psychological well-being and overall health. Implementing effective interventions that address the unique needs of vulnerable populations and incorporate technology can improve access to mental health care and promote resilience in the face of adversity.

In conclusion, the COVID-19 pandemic has highlighted the critical importance of mental health care in promoting overall health and well-being. Addressing mental health needs requires a comprehensive and integrated approach that incorporates traditional and digital interventions, addresses social determinants of mental health, and prioritizes vulnerable populations. By taking a proactive and collaborative approach

to mental health care, we can promote resilience, growth, and well-being in the face of adversity.

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