

# COVID-19 and Mental Health

Benjamin Hager '23

## Introduction

The COVID-19 pandemic rocked the world in one of the worst ways possible in 2020. Worldwide, nearly 3 million people have died from the virus ("Coronavirus Death Toll," 2021). However, the damage extends beyond these deaths; as a result of quarantines and all of the other stressors present at this time, many have faced serious mental health problems whose consequences could extend for years (Pfefferbaum & North, 2020). In this review of existing literature, I will go over stressors during the pandemic, mental health risks, high risk groups, possible solutions to mental health problems during pandemics, and population-specific evidence.

## Stressors

According to Pfefferbaum & North (2020), "Uncertain prognoses, looming severe shortages of resources for testing and treatment and for protecting responders and health care providers from infection, imposition of unfamiliar public health measures that infringe on personal freedoms, large and growing financial losses, and conflicting messages from authorities are among the major stressors that undoubtedly will contribute to widespread emotional distress and increased risk for psychiatric illness associated with Covid-19."

Stressors associated specifically with quarantining include "greater duration of confinement, having inadequate supplies, difficulty securing medical care and medications, and resulting financial losses" (Pfefferbaum & North, 2020).

## Mental Health Symptoms

Pfefferbaum & North (2020) explain that mental health problems aren't unique to the COVID-19 pandemic; natural disasters and emergencies of all kinds tend to come with their own mental health consequences. After such disasters, most individuals tend to move on without suffering long-term consequences. However, some individuals can develop lasting depression and anxiety as a result of the trauma experienced during a disaster such as the COVID-19 pandemic (Pfefferbaum & North, 2020). Cullen et al. (2020) agree; they expect to see some individuals develop symptoms of PTSD after the pandemic. Additionally, a December 2020 article found that relatively high rates of "anxiety, depression, post-traumatic stress disorder, psychological distress, and stress" were reported due to the COVID-19 pandemic (Xiong et al., 2020).

The act of quarantining was shown to increase "stress, depression, irritability, insomnia, fear, confusion, anger, frustration, [and] boredom..." Individuals are also more likely to experience suicidal thoughts during quarantine. Furthermore, Cullen et al. (2020) say that "psychological reactions to pandemics

include maladaptive behaviours, emotional distress and defensive responses." Marroquín et al. (2020) also found that stay-at-home orders and social distancing led to increased rates of depression, generalized anxiety disorder, and acute stress between February and March 2020.

## High-Risk Groups

People who contract COVID-19 are at a higher risk of experiencing negative psychological effects. Vindegaard & Benros (2020) found that COVID-19 patients experienced significant post traumatic stress symptoms and anxiety after contracting the virus.

According to Pfefferbaum & North (2020),

"[P]eople who contract the disease, those at heightened risk for it (including the elderly, people with compromised immune function, and those living or receiving care in congregate settings), and people with preexisting medical, psychiatric, or substance use problems are at increased risk for adverse psychosocial outcomes."

Cullen et al. (2020) agree, saying that "people who are prone to psychological problems are especially vulnerable." Furthermore, such people also tend to have a shorter life expectancy and experience worse physical health than the rest of the population, putting them at an increased risk of contracting the COVID-19 virus. This results in an increased risk of experiencing even *more* psychological problems, creating a sort of positive feedback loop. This is supported by Vindegaard & Benros (2020) who, in a review of 43 studies, found that "patients with preexisting psychiatric disorders reported worsening of psychiatric symptoms." However, this may be a short-sighted analysis of the situation; a 2021 article suggests that individuals with preexisting mental health conditions have experienced a smaller increase in mental health problems relative to the general population. In fact, people with the highest perceived mental stress before the pandemic "tended to show a slight symptom decrease [during the pandemic]" (Pan et al., 2021).

Healthcare workers are also at increased risk of mental health problems due to the pandemic, and should be sure to monitor their own symptoms and well-being alongside those of their patients. This is supported by evidence that suggests healthcare workers have experienced higher levels of psychiatric symptoms during the pandemic (Vindegaard & Benros, 2020). Cullen et al. (2020) echo this sentiment, saying “more needs to be done to manage anxiety and stress in [healthcare workers] and, in the longer term, help prevent burnout, depression and post-traumatic stress disorder.”

A study during the H1N1 influenza outbreak found that “children and patients with neurotic and somatoform disorders were significantly over-represented” among people expressing high levels of concern and anxiety about the outbreak (Cullen et al., 2020), and Xiong et al. (2020) found that women, people under 40, people with mental health problems, and students were all at an increased risk of psychological problems during the pandemic.

A study published in 2021 found that personality might play an important role in identifying individuals who have a higher risk of experiencing negative psychological symptoms during a pandemic. The study found that extraversion and neuroticism were associated with higher levels of perceived stress (Liu et al., 2021). Neuroticism was mediated by perceived threat and efficacy, but extraversion was not. It is possible that extraverts experienced greater stress during periods of social isolation as a result of the decrease in social interactions.

### **Possible Solutions**

Efforts to combat the psychosocial consequences of the pandemic, including screening for mental health problems, psychoeducation, and psychosocial support, should first target high risk groups such as the elderly, people with existing mental health problems, and healthcare workers (Pfefferbaum & North, 2020). Mental health screenings should ask questions about

“Covid-19–related stressors (such as exposures to infected sources, infected family members, loss of loved ones, and physical distancing), secondary adversities (economic loss, for example), psychosocial effects (such as depression, anxiety, psychosomatic preoccupations, insomnia, increased substance use, and domestic violence), and indicators of vulnerability (such as preexisting physical or psychological

conditions)” (Pfefferbaum & North, 2020).

Health care professionals should promote stress management and coping skills, such as maintaining routines and structure; connect patients to support groups and other mental health services, and encourage individuals to get professional mental health assistance when needed (Pfefferbaum & North, 2020). Cullen et al. (2020) suggest the provision of “targeted psychological interventions for communities affected by COVID-19, particular supports for people at high risk of psychological morbidity, enhanced awareness and diagnosis of mental disorders... and improved access to psychological interventions.”

Online health support services could also be effective in the mitigation of mental health problems during pandemics (Rajkumar, 2020).

Health care organizations should also put efforts in place to combat stress and anxiety among health care workers by creating processes to identify, refer, and treat severe psychological symptoms among workers (Pfefferbaum & North, 2020). Cullen et al. (2020) say that the Centers for Disease Control and Prevention (CDC) provide valuable advice to healthcare workers regarding the monitoring of their own mental health; however, this advice needs to be supported by greater awareness of the problem in the healthcare community itself. Xiong et al. (2020) agree, saying that mitigation of psychological stress during pandemics requires government, organizational, and individual efforts.

Cullen et al. (2020) say that “sufficient resources are typically not provided to manage or attenuate pandemics’ effects on mental health and wellbeing.” Simply responding to mental health problems during pandemics with more adequate measures could significantly mitigate the negative mental health consequences of such pandemics.

In a 2020 article, Odekerken-Schröder et al. proposed the use of companion robots to combat loneliness during periods of social isolation, but their results were inconclusive and much more research is needed.

### **Children & Families**

A nationwide study in Germany found that adolescents experienced significantly lower quality of life (40.2% vs. 15.3%) and significantly higher rates of mental health problems (17.8% vs. 9.9%) during the pandemic than before the pandemic (Ravens-Sieberer et al., 2021).

Pfefferbaum & North (2020) notes that because parents often underestimate the stress on their children, families should try to have open discussions about mental health during the pandemic. This is supported by the findings of a study of 4,342 primary and secondary school students in Shanghai, China conducted in March of 2020. According to the study, students who perceived benefits from quarantining at home were less likely to experience psychopathological symptoms and more likely to experience greater life satisfaction. Students who perceived no benefits from quarantining at home nonetheless reported lower levels of psychopathological symptoms and higher levels of life satisfaction when they had open discussions about the pandemic with their families (Tang et al., 2021).

In another longitudinal study conducted in the year leading up to the pandemic through two months into lockdowns in the United States, it was found that adolescents experienced “significant increases in depressive symptoms and anxiety, and a significant decrease in life satisfaction.” These symptoms were particularly significant among girls. This study also found that adolescents were more concerned about government regulations during the pandemic than they were about the COVID-19 virus itself (Magson et al., 2020).

Among older adolescents, different problems begin to emerge. On the one hand, as adolescents age, they become more independent; however, they also begin to form their identities based on certain groups of which they are a part, such as sports teams. A study of 234 student-athletes found that while student-athletes experienced some negative psychological symptoms after quarantines and restrictions on practice were put into place, athletes who maintained connections with their teammates were better able to cope with such symptoms (Graupensperger et al., 2020). Older adolescents also reported increased frequency of alcohol and cannabis usage during the pandemic (Dumas et al., 2020).

### Senior Citizens

A 2020 study found that older people were more likely to believe that they would die if they caught COVID-19 but less worried about catching the virus. Older individuals were also found to experience fewer negative emotions as a result of the pandemic than younger individuals (Bruine de Bruin, 2020).

Another study found that of a group of 151 adults with an average age of 75 years, many experienced greater loneliness, depression, and anxiety during lockdowns. Such symptoms were associated with greater difficulties with day-to-day tasks, new technology required for communication, and poor emotional coping (Kotwal et al., 2020).

### Location-Based Studies

A longitudinal study of mental health in the UK before and during the pandemic found that mental health had “deteriorated” since the beginning of the pandemic and that women, young adults, and people with young children were the most likely to experience increased mental distress (Pierce et al., 2020).

Another longitudinal study in the UK found some interesting data regarding varying psychological symptoms based on gender and ethnicity.

“Both women—regardless of their ethnicity—and Black, Asian, and minority ethnic (BAME) men experienced a higher average increase in mental distress than White British men, so that the gender gap in mental health increases only among White British individuals. These ethnic-gender specific changes in mental health persist after controlling for demographic and socioeconomic characteristics” (Proto & Quintana-Domeque, 2021).

### Conclusion

Tandon (2020) points out that even in the face of the destruction wrought by the COVID-19 pandemic, it also presents an opportunity to learn from the mistakes we made, enabling us to better prepare for future pandemics. It’s not about what we will do *if* there is another pandemic in the near future, but what we will do *when* there is another pandemic. In the early days of the pandemic, we didn’t know a lot about the COVID-19 virus; now we do, and we even have a vaccine for it. As of March 29th, 2021, 15% of the U.S. population had been fully vaccinated (Smith-Schoenwalder, 2021) and many believe that a majority of the U.S. population will be vaccinated by summertime. Although social-distancing and other preventative efforts are still in place to combat COVID-19, it seems as though the end is near. As we approach the light at the end of the tunnel, however, it behooves us to remember the lessons we learned from this pandemic as we return to a more “normal” way of life.

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