



## Key Inforbits:

- Mental Health Data in COVID-19
- Risk Factors for Psychiatric Symptoms
- Mental Health Treatment and Coping Mechanisms in COVID-19
- Areas for Potential Future Research

# MENTAL HEALTH DURING THE COVID-19 PANDEMIC



Sactown Magazine

Some of the currently reported symptoms directly linked to COVID-19 are fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea and vomiting, and diarrhea.<sup>1</sup> While general medical complications and symptoms have been the focus of most of the published data regarding this virus, the indirect effect this virus and the associated pandemic can have on a person's mental health should also be taken into consideration. Worries about shortages of resources for testing and treatment, conflicting messages from authoritative figures, physical isolation, financial losses, fear and worry about personal health and health of others are just a few of the contributing factors that have played a role in affecting peoples' mental health during this pandemic.<sup>2,3</sup>

There are certain groups of people who may be at an increased risk for developing mental health issues during the pandemic, but these issues are not limited to only those with pre-existing mental health disorders. Certain groups that may be at an increased risk include people who have contracted the virus, people with pre-existing medical conditions (including but not limited to mental health conditions), healthcare workers, and those at a heightened risk of contracting the virus (e.g. elderly, immunocompromised, those in nursing homes or retirement facilities).<sup>3</sup> Healthcare workers, in particular, can experience stress from a wide array of both physical and psychological factors. Challenges for healthcare workers include but are not limited to increased workload, fears of contracting the virus themselves or spreading it to their families, new and changing treatment protocols, changes in use of personal protective equipment (PPE), and caring for patients who are severely ill and deteriorating.<sup>4</sup>

# Mental Health Data

Around the world, the COVID-19 pandemic has been associated with increased incidences of mental health disorders, including depression, anxiety, substance use, and post traumatic stress disorder symptoms. According to a survey of 5,412 adults in the United States, 40.9% reported at least 1 adverse mental or behavioral condition.<sup>5</sup> Compared to a similar time frame of 2019 corresponding to the pandemic in 2020, symptoms of anxiety and depression are being reported 3- and 4-times more in 2020, respectively.<sup>5</sup> In the United Kingdom, General Health Questionnaire (GHQ-12) scores (n = 15,376) were observed to be 0.48 points higher than would have been expected from year to year, with a change of 2.69 points and 1.57 points in average score for those ages 18-24 and 25-34 respectively. In this UK study, 27.3% of survey takers had a score that indicated "clinically significant mental illness", with 44% of women between ages 16 and 24 having these scores.<sup>6</sup> Another study performed in the United States observed an increase in depression across demographic groups during the pandemic, resulting in rates three times higher than normal. It was determined that depression symptoms were increased by a factor of 1.5, 2.6, 3.7, and 7.5 for mild, moderate, moderately severe, and severe depression, respectively.<sup>7</sup>

## Risk Factors for Psychiatric Symptoms<sup>2</sup>

- LIVING ALONE
- FEMALE GENDER
- SUBSTANCE ABUSE
- POOR SLEEP QUALITY
- PREVIOUS STRESSFUL LIFE EVENTS
- LACK OF KNOWLEDGE OF THE PANDEMIC
- HIGH SOCIAL MEDIA EXPOSURE
- FRONTLINE HEALTHCARE WORKERS
- NOT HAVING A CHILD OR HAVING 2 OR MORE CHILDREN
- CURRENT MEDICAL HISTORY (INCLUDING PSYCHIATRIC DISORDERS)

## Fast Facts<sup>5</sup>

### PERCENT OF U.S. ADULTS WHO REPORTED

- SYMPTOMS OF ANXIETY OR DEPRESSION: 30.9%
- STARTED OR INCREASED SUBSTANCE USE TO COPE WITH STRESS/EMOTIONS RELATED TO COVID-19: 13.3%
- SYMPTOMS OF TRAUMA/STRESS-RELATED DISORDER: 26.3%
- HAVING SERIOUSLY CONSIDERED SUICIDE IN THE PAST 30 DAYS: 10.7%

In a systematic review of 43 studies, two studies involving patients with confirmed cases of COVID-19 showed that 96.2% of 714 patients experienced high levels of post-traumatic stress symptoms and had significantly higher levels of depressive symptoms.<sup>2</sup> Several trials have observed a worsening of psychiatric symptoms in those with pre-existing mental health conditions.<sup>2,5,7</sup> Thirty-seven and a half percent (37.5%) of patients (n = 2,129) in the systematic review indicated a worsening of their eating disorder, 56.2% reported additional symptoms of their anxiety, and 20.9% reported worsening of psychiatric disorder symptoms.<sup>2</sup> A study performed by the Centers for Disease Control and Prevention (CDC) observed that symptoms of COVID-19-related trauma and stressor related disorders, increased substance use, and suicidal ideation were more common in those who were employed and among essential workers compared to those unemployed and classified as non-essential, respectively.<sup>5</sup>

# COVID-19: Mental Health Treatment<sup>8</sup>

## Screening Options

- 7-item Generalized Anxiety Disorder Scale (GAD)
- The PHQ-9- screening tool for depression



## Telepsychiatry, Telepsychology, and Teletherapy

- Advantages over in-person visits: access for those with mobility restrictions, no travel requirements, increased availability (especially to those in rural and underserved medical communities), and improved appointment compliance.
- When looking at telepsychiatry vs. in-person visits, there have been comparable outcomes among patients.
- [Psychology Today](#) is an example of a tool available for people to locate an online therapist.

## Medications

- Ensure there are no interruptions in a patient's medication schedule.
- Advise patients to get 90-day supplies of their needed medications (coverage varies with every insurance provider).
- The [National Alliance of Mental Illness Covid-19 Resource and Information Guide](#) includes information on payment assistance programs that help patients afford their medications.


## Apps for Mental Health


- The American Psychiatric Association (APA) suggests them as a complement, not a replacement, for treatment.
- Two mental health app directories:
  - (1) NHS Apps Library  
Apps that have been "approved" using a number of criteria including effectiveness, security, and technical stability.
  - (2) PsyberGuide in partnership with Anxiety and Depression Association of America  
Ratings based on "credibility, use experience and expert review", and credibility score that "represents the strength of the scientific research support for the app itself, and the therapeutic interventions the app provides"


### Suggested Apps with a credibility score of 4 or higher out of 5


This Way Up  
Brain HQ  
Headspace  
Woebot  
Good Days Ahead  
Cognifit


 Be informed on what to do if you become sick or are concerned about COVID-19 .

Be informed on where and how to get treatment, which includes supportive services such as counseling or therapy. 

 Take breaks from watching, reading, or listening to news stories and news stations, including social media. Constant negative messages about the pandemic can be unsettling.

Take care of your body. Stretching, meditating, eating well-balanced meals, exercising regularly, getting plenty of sleep, and avoiding excessive use of alcohol and tobacco products are all ways to help alleviate the stress. 

 Connect with others. Take time to communicate with people you trust about your worries and fears. Community and faith-based organizations are good sources of communication. Consider connecting online, through social media, by phone, or by mail.

Take time to unwind. Engage in activities you enjoy that are also aligned with social distancing protocol (e.g. biking, hiking, reading, cooking, etc.). 

## Healthy Ways to Cope with Stress<sup>1</sup>

## Health Insurance Considerations<sup>8</sup>

### Medicare

- A CMS 1135 Waiver was put into effect for the duration of the COVID-19 Health Emergency that allows patients on Medicare to be seen by a provider via video at home in any state.
- There will also be no penalties for noncompliance with HIPAA rules to allow HIPAA noncompliant video platforms such as Skype and FaceTime to be used.
- For providers, virtual visits will be considered the same as in-person visits and paid at the same rate as in-person visits.

### Medicaid

- Most state programs reimburse for some telepsychiatry.
- Coverage of psychological services in Medicaid programs vary widely by state.
- There will be no penalties for noncompliance with HIPAA rules.

### Private Insurance

- There will be no penalties for noncompliance with HIPAA rules.
- Many private insurers cover telepsychiatry/teletherapy. Be sure to check with a patient's individual plan. Patients have the right to appeal if their insurance company denies coverage for their virtual appointment.
- The American Telemedicine Association and Federation of State Medical Boards: information regarding state policies and laws on coronavirus.



# Areas for Potential Future Research<sup>2</sup>

Direct central nervous system invasion of the COVID-19 virus is a possible explanation of delirium which has been a frequently reported symptom of SARS-CoV-2. Two case studies reported SARS-CoV-2 meningitis or encephalitis (only one of these cases had a confirmed positive SARS-CoV-2 real-time polymerase chain reaction (RT-PCR) test on cerebrospinal fluid (CSF)).

Angiotensin-converting enzyme 2 (ACE2) is a functional receptor expressed in neurons for SARS-CoV-2. It has been proposed that SARS-CoV-1 enters the brain through the olfactory bulb (an essential structure of the olfactory system, the sensory system used for smelling). Anosmia, or loss of smell, has been identified as an early symptom of COVID-19. This indicates that SARS-CoV-2 could be neurotrophic and lead to increased neuropsychiatric symptoms in COVID-19 patients. The National Institutes of Health (NIH) COVID-19 Guidelines recommend that persons with COVID-19 who are prescribed ACE inhibitors for cardiovascular disease (or other indications) should continue the medication.

In severe COVID-19 cases, significantly high levels of neutrophils and significantly low levels of lymphocytes have been reported. Additionally, high amounts of pro-inflammatory cytokines (IL-beta, IFN-gamma, IP10, and MCP-1) have been reported, suggesting a T helper cell type 1 response. In patients with major depressive disorder, a pro-inflammatory response in plasma and CSF has been reported. The association between neuropsychiatric symptoms and pro-inflammatory response warrants further studies and evaluation.

## Resources:

- 1) CDC: coronavirus disease 2019 (COVID-19) [Internet]. Centers for Disease Control and Prevention; Atlanta, GA. Symptoms of coronavirus; 2020 May 13 [cited 2020 Sep 22]; [about 4 screens]. Available from: [https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html?utm\\_campaign=AC\\_CRNA](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html?utm_campaign=AC_CRNA)
- 2) Vindegaard N, Benros ME. COVID-19 pandemic and mental health consequences: systematic review of the current evidence. *Brain Behav Immun* [Internet]. 2020 May 30 [cited 2020 Sep 22];XX:1-12. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7260522/pdf/main.pdf>
- 3) Pfefferbaum B, North CS. Mental Health and the Covid-19 pandemic. *N Engl J Med*. 2020 Aug 6;383(6):510-12.
- 4) Walton M, Murray E, Christian MD. Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. *Eur Heart J Acute Cardiovasc Care*. 2020 Apr 28;9(3):241-47.
- 5) Czeisler MÉ, Lane RI, Petrosky E, Wiley JF, Christensen A, Njai R, Weaver MD, Robbins R, Facer-Childs ER, Barger LK, Czeisler CA, Howard ME, Rajaratnam SMW. Mental health, substance use, and suicidal ideation during the COVID-19 pandemic- United States, June 24-30, 2020. *MMWR Morb Mortal Wkly Rep*. 2020 Aug 14;69(32):1049-57.
- 6) Pierce M, Hope H, Ford T, Hatch S, Hotopf M, John A, Kontopantelis E, Webb R, Wessely S, McManus S, Abel KM. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatry*. 2020 Oct 1;7(10):883-92.
- 7) Ettman CK, Abdalla SM, Cohen GH, Sampson L, Vivier PM, Galea S. Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA Netw Open*. 2020 Sep 2;3(9):1-12.
- 8) NAMI: NAMI blog [Internet]. Arlington: National Alliance on Mental Illness; c2020. Coronavirus: mental health treatment; 2020 Apr 15 [cited 2020 Sep 22]; [about 5 screens]. Available from: <https://nami.org/Blogs/NAMI-Blog/April-2020/Coronavirus-Mental-Health-Treatment>
- 9) COVID-19 Treatment Guidelines Panel. Coronavirus Disease 2019 (COVID-19) Treatment Guidelines. National Institutes of Health [updated 2020 Sep 1, cited 2020 Sep 28]. Available at <https://www.covid19treatmentguidelines.nih.gov/>.

# The last "dose"...



"The humanity we all share is more important than the mental illnesses we may not."

- Elyn R. Saks (American professor, 1956 - )

"If you were not crazy before the COVID-19 pandemic, you may well be afterwards."

- Steven Magee (Electrical engineer and author)

"Anything that's human is mentionable, and anything that is mentionable can be more manageable. When we can talk about our feelings, they become less overwhelming, less upsetting, and less scary."

- Fred Rogers (American television personality, 1928-2003)

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