

**Psychological Impact of COVID-19 on Mental Health and Life Quality in Healthy Individuals: A Review**

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The coronavirus disease 2019 (COVID-19) and its complications have spread throughout the world. The overall mortality rate appears to be similar to the pandemic flu. As a result of the worldwide spread of the COVID-19 epidemic, which was triggered by a coronavirus infection that caused an acute respiratory disease (SARS-CoV-2) in the Chinese city of Wuhan, a socio-economic disaster and significant psychological suffering occurred. During the COVID-19 crisis, several psychological disorders and serious psychological effects, such as stress, depression, anguish, and anxiety, progressively evolved. This review examines some of the existing research on the impact of COVID-19 on the mental health of the general population. A comprehensive assessment of scientific articles on the psychological impact of COVID-19 on mental health outcomes was conducted. The roles of risk and preventative factors in susceptible people's productivity to acquire developmental disorders, as well as the many elements of behavior related to the COVID-19 pandemic, have also been investigated. This review evaluates some of the existing research findings on the impact of COVID-19 disease on the mental health of the general population. COVID-19 isolation has long been recognized as one of the most significant emotional responses to a COVID-19 pandemic among the general public. Finally, both governmental and non-governmental groups must develop psychological preventative methods for several COVID-19-related psychiatric issues, as well as the numerous populations who are far more vulnerable to the pandemic.

Keywords: Anxiety, COVID-19, Depression, Pandemic, Mental health, Psychological.

Introduction

An unusual cluster of pneumonia cases occurred in Wuhan, China in December 2019. The World Health Organization has identified this as a coronavirus disease in 2019 (COVID-19). The virus most likely to cause the pandemic, SARS-CoV-2, shares 79% of its DNA with SARS-CoV-1 from the 2003 epidemic.¹ The pandemic status was first assigned to the epidemic on March 11, 2020, by the World Health Organization (WHO). Rapid changes in the environment have a significant impact on people's daily lives and the global, public, and private economies. Globally, many governments have put restrictions in place to limit the spread of the COVID-19 pandemic, resulting in significant declines in a variety of economic activities, most notably travel, as well as other financial activities.² Suicide and mental health problems associated with suicide are expected to rise as a result of the viral outbreak's fear and uncertainty, as well as the widespread lockdowns and economic downturn. Suicide rates have risen in many nations, such as Pakistan, the United States, India, France, Germany, and Italy.^{3,4} There has been an upsurge in psychological distress reported by the general population, individuals with mental health issues, and healthcare professionals.⁵ More attention should be paid to mental health in society, as well as measures that might assist people to get through these difficult times.

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The research also aimed to find factors that are linked to mental health problems. Experts predict that new viruses will continue to emerge from such locations as long as they are open for business.⁶ Tension, agony, dejection, exasperation, and unpredictability all flared up during the COVID-19 upsurge, with some psychological trouble and consequences relating to mental stability.⁷ The aim of this study was to draw the attention of healthcare practitioners to the urgent need to integrate psychological therapies into the treatment of COVID-19 in India.

Methodology

To find qualifying studies, PubMed, EMBASE, Google Scholar, Scifinder, and Web of Science were consulted. Sources from January 2020 to August 15, 2021, were searched. The following key phrases, "Covid-19, mental health, psychological influence/ impact", as well as a MeSH search were used. Language limitation command was avoided during the search. Furthermore, the reference lists of the articles were obtained for additional research.

Results and Discussion

Key components of the emotional and behavioral response to the COVID-19 pandemic

Non-specific and unrestrained agitations associated with infection

As a result of the possibility of infection, some people may suffer from severe concern over their health, as well as worry about others and family members, according to some scrutinized findings.^{8,9} People who fall into this category are more likely to experience anxiety if they have a lot of symptoms that could be linked to the infection. According to various findings, childbearing women and parents of

adolescent children are the people who are most likely to be afraid of becoming infected with the pathogen.¹⁰

Personalized reaction to anxiety

An investigation into the gender-specific as well as self-traits that are more significant in association with various psychological effects of the COVID-19 epidemic was conducted by the Italian community.¹¹ Individuals with cyclic disorder and/or distressed temperaments have been shown to have a greater emotional effect than the current scenario, according to the data. People must maintain healthy lifestyles to avoid the risk of increasing psychological distress, particularly in males who are socially dependent.¹¹

Prevalence of agitation

Self-doubt about the future was connected to social isolation as a consequence of limitations and different lockdown methods. Concerns about newly discovered transmissible pathogens have unexpectedly risen.¹² Furthermore, anxiety has been linked to fatigue and substandard performance in medical management workers, and weariness and loneliness have been linked to rage, frustration, and suffering as a result of quarantine restrictions.¹³ Additional devastation and persistent anxiety may cause a sense of diminished community-based aid, isolation of loved ones, deprivation due to independence, unreliability, and lethargy in a pandemic situation.¹⁴

Switch in the day-to-day routine

The diagnosis of poor sleep quality in people infected with the Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2) revealed an increase in siesta disturbance, a serious cause of anxiety, depression, and psychotic behavior.¹⁵ Furthermore, poor sleep quality, combined with the difficulty of assembling a family, makes parenthood more difficult.¹⁶ In addition to adolescent community-based authority, beliefs, and compliance with social distancing recommendations were put in place in the United States.¹⁷ On the other hand, people who have been susceptible to "optimism bias," or the impression that they would not catch the disease as easily as others, were less likely to engage in risk-reducing behaviors.¹⁸

Exasperation and weariness

Perturbation, lethargy, solitude, and grief are all linked to confinement, unusually limited social interaction with others, and a lack of consistent routines.¹⁹ According to Jeong *et al.*, frustration has been caused by daily activities, interruptions with social demands, and paucity based on participation in activities related to the social platform.²⁰ Some of the major components of the emotional and behavioral response to the COVID-19 pandemic are summarized in Figure 1.

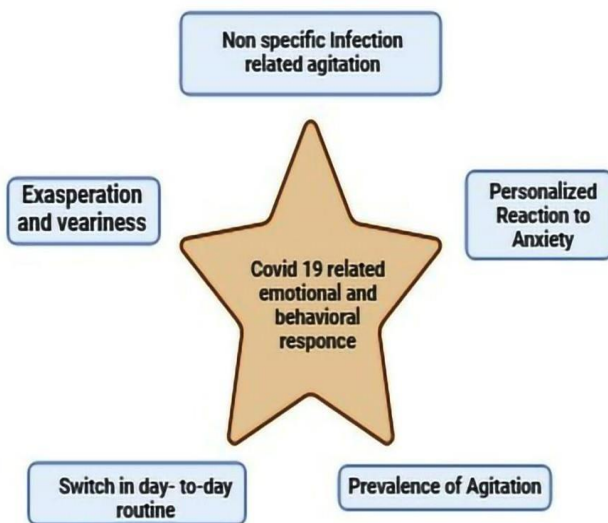


Figure 1: Schematic diagram of major components of the emotional and behavioral response to the COVID-19 pandemic.

Source: Adapted from BioRender.com

COVID-19-related psychological disorders

Anxiety, despair, obsessive-compulsive disorder (OCD), and post-traumatic stress disorder (PTSD) are examples of the psychological issues that the COVID-19 pandemic may aggravate or cause. Nearly 35% of those infected with SARS-CoV-2 had psychological disturbances, according to a worldwide study of the Chinese population that included nearly 52,000 people.²⁰ Although, this finding is not supported by the literature, it was discovered that women were more susceptible than men.²¹ As a result, the majority of the commonly discussed psychological effects associated with the epidemic are thought to have been expanded upon.

Consternation along with depressive thoughts

Research conducted by a Chinese team during and after the outbreak of COVID-19 on January 20th, 2020, discovered a spike in phrases that replicate negative emotions such as anxiety, despair, and rage among approximately 18,000 social media users.^{20,22} Disastrous bodily sensory interpretations, dysfunctional health and sickness beliefs, and maladaptive behavioral methods are hallmarks of this disorder. This condition is characterized by hand washing, social isolation, panic buying, and excessive use of hand sanitizer, medicine, and protective masks.²³

Post-traumatic stress disorder

PTSD is another significant condition that is expected to rise, with rates comparable to or lower than those found in previous pandemics such as H1N1, influenza, and Ebola.^{24,26} Professionals in the mental health field have to be prepared to cope with the negative impacts of post-traumatic stress disorder (PTSD). Suicide risk is increased by 2–5 times for those who are socially isolated for long periods.²⁴

Dependency on liquor

During the shutdown, some governments imposed restrictions on the sale of liquor. The rationale for this restriction was based on the impaired ability of individuals to implement preventive measures, the significant role of alcohol in domestic violence, and also the effect of alcohol on the immune system.²⁶ As a result, a higher number of patients with addiction developed abstinence syndrome.²⁷ Another complicated effect of such efforts is the impact on those who were recovering or trying to recover from alcoholism. Restriction of liquor trading during this time may be counterproductive in terms of returning to normal.²⁶ In places where liquor trading is not forbidden, such as the United Kingdom (UK), the intake of liquor during a lockdown has surged. As a result, governments that prohibit the sale of alcohol must take into account the consequences for those who are addicted.

Imminence elements of COVID-19 infection

Agnosia

The persistence of alexithymic features may reduce psychological well-being in some people, which increases the risk of associated anxiety during the quarantine.²⁸ People suffering from psychosomatic illness frequently exhibit a combination of these symptoms, and it is defined as "no words for the mood." Alexithymia is linked to anxiety, depression, and psychological anguish in comparison to non-alexithymia.

Insufficient supplies of resources

The materials offered by public health officials to combat the outbreak may be ineffective, according to the data. For example, while water and food are readily accessible, thermometers or face masks may take longer to arrive than expected.⁸ Even when basic resources (such as food, drink, and clothing) are insufficient during the quarantine period, a sense of irritation and insecurity is common, which is a leading cause of worry, anxiety, and rage despite being out of seclusion for 4–6 months.⁹

Insufficient data

According to available evidence, insufficient or sparse data originating from unequal recommendations provided by public health authorities may be a major stressor,^{29,30} leading to confusion about the need for

quarantine. Braunack-Mayeretal also mentioned the insufficiency of transparency from authoritative officials regarding the outbreak's austerity during the SARS pandemic, which may be directly attributed to conflicting perspectives.

Susceptibility to mental illness

Several populations are more sensitive to the COVID-19 pandemic's emotional, behavioral, and psychosocial factors. The focus of this presentation is on the most frequently mentioned ones. People who have previously had mental health issues, people who have lived in a convalescent home, people who have been cared for by a caretaker, and people who have been infected with COVID-19 along with their house people are all at a higher risk of the pandemic's mental health consequences.^{31,32}

Individuals who are at a higher risk of developing COVID-19

The susceptibility level of the individual to COVID-19 disease differs from one individual to the other. Some people are more likely vulnerable, while others may be less susceptible. Mental illness susceptibility to COVID-19 is presented in Figure 2.

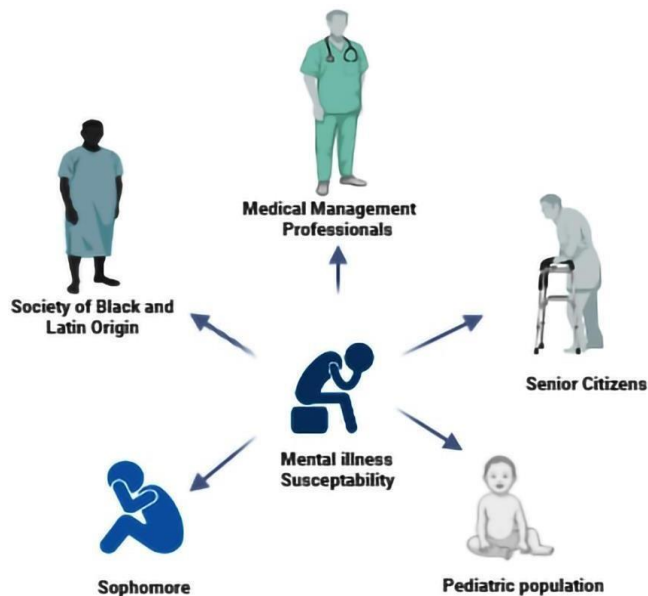


Figure 2: Schematic diagram of mental illness susceptibility.

Source: Adapted from BioRender.com

Professionals in medical management

Healthcare practitioners, particularly frontline workers, were one of the most important groups in this category during the pandemic. These professionals are faced with a variety of situations as well as some kinds of disorders, such as the fear of becoming infected as well as the fear of spreading the infection to others. Also, increased burden, insufficient trial, narrow options in rendering the therapy, disruption in the daily schedule, as well as a lack of personal safety tools and various medical supplies are included. Physical symptoms like headaches and sore throats, as well as mental health issues like anxiety, sadness, stress, irritability, insomnia, rage, and frustration, may make people more sensitive to such disorders.^{33,34}

Senior citizens

The elderly, who are at a high risk of contracting the coronavirus disease, are being advised to remain at home and isolate themselves.³⁵ It has been proven that when older people are placed in situations where they are socially isolated, they are more likely to feel anxious and sad,³⁵ or those who are more accustomed to interacting with others. Many elderly people rely on centers for recreation, religious services, unpaid work, and societal services, all of which have been severely hampered by the outbreak of coronavirus disease.³⁵

As a result, there is a significant psychological and emotional toll of disorders.^{33,36}

Pediatric population

Children, especially the young, are particularly vulnerable during a pandemic. This is due to the lack of social connections at home, which are crucial for identity and well-being at a young age, as well as poor body mechanics and exhaustion.^{36,37} Indeed, mental illness, physical fitness, and adult fecundity are all influenced by the years spent as a child.^{37,38} According to data from previous outbreaks, children who were exposed to desolation measures were found to be quintuple times more likely to require primary care and develop PTSD.³⁷ Furthermore, children who were not enrolled in school (i.e., on weekends and during summer vacations) had a longer screen time, inconsistent sleep patterns, and a poor diet.³⁸ Over long periods, such as the pandemic's yet-to-be-determined lifespan, this can be extremely dangerous.

Sophomore

University students are similarly prone to large changes in daily activities, which has resulted in a psychological impact during the coronavirus epidemic, as colleges decided to close temporarily due to the worsening of the situation as announced by the government.³² Living far away from home, a fluctuating family income, and a lack of technological access for attending online programs are all factors that could exacerbate this problem, as it has the potential to overburden the system.³¹

Society of black and Latin origins

Structural racism denies various racial and ethnic groups an equitable approach to medical management and resource protection, and lacks adequate housing, which is a major social determinant of health. Approximately one-third of black Africans, including one-fourth of black Caribbeans, work in the United Kingdom. They work in critical services and are unable to work from home.^{39,40} Furthermore, many primarily black and Latino communities lack adequate access to well-equipped hospitals.⁴⁰ People of color are more likely to be affected by the COVID-19 pandemic, which could lead to increased infection anxiety and poor mental health outcomes.^{39,40} Without a doubt, Afro-Americans had the highest COVID-19 fatality rate across the United States, with previous statistics indicating that the aforementioned black people accounted for 33% of all COVID-19 fatalities.⁴⁰

Measures to relieve the COVID-19 pandemic from behavioral and psychological conditions

It is vital that the public healthcare service, in the current COVID-19 outbreak, as well as the general public, come together to support prophylactic as well as supporting activities, both in terms of disease transmission and, on the other hand, behavioral, emotional, and psychological effects. It is crucial in the field of mental health for psychologists who are dealing with the epidemic as a whole.⁴¹ Their knowledge and experience are essential for keeping an eye on the situation and coordinating support actions to prevent an exorbitant increase in psychological disorders such as nervousness, obsessive-compulsive disorder (OCD), and PTSD.^{41,42} Finally, because poor mental health has been linked to reduced cohesion in SARS-CoV-2 prevention methods, improving one's mental health may help to lower infection rates.⁴⁴

Telecare consultations

As previously stated, poor clinical follow-up is among the most critical variables influencing the COVID-19 epidemic's mental health repercussions. on lunatic individuals. Telepsychology services have seen a significant increase in demand during the epidemic, and executives have attempted to meet the unusually high demand.⁴⁴ Before the COVID-19 pandemic, psychologists used telepsychology for 7.07% of their work; after the pandemic, this percentage rose to 85.53%, with 67.32% of mental health practitioners exclusively using telepsychology.⁴⁵

Action line

Ingress is directed toward those under quarantine by well-experienced healthcare medical management practitioners who can provide advice on potential indications or issues. Such channels of contact would reassure and calm worried individuals, giving them the feeling of not being forgotten. Individuals who are confined to their homes may benefit from an electronic-assisted category to help them cope with their fears and anxieties.²⁴ Suicidal tendencies or a history of mental illness require extra attention. This necessitates expanding the volunteer team and preparing people to deal with the new requirements, such as accessing assets via the internet or by phone. Individuals who refuse to seek help, such as social isolation and humor, require special attention.⁴⁶

Monitoring and support for digital technology

In this epidemic, there is a worldwide issue that must be addressed, which includes social media dismay. Major news organizations should hire professionals to reduce the correction factors in public-facing material, ensuring that it complies with current rules and scientific evidence, to avoid misleading media stories.⁴⁶ When engaging with news broadcasts, simple language should be used instead of complex and scientific terms. Instead of vague or complex instructions, they should provide realistic and detailed recommendations.^{47,48} This makes it easier for those who are more vulnerable to understand the information and participate in social activities.⁴⁸

Monetary sustenance

Those with lower incomes and freelancers are most at risk from the COVID-19 epidemic, and governments throughout the world should help alleviate that burden. Having a financial strategy in place to alleviate community pressures can help alleviate some of the stress associated with quarantine.⁴⁶ As a way to reduce community pressure, the government should pay for the medical expenses of COVID-19 identified and suspect patients. This approach may inspire more individuals to seek medical attention, which will assist in improving health equality and illness prevention for those who need it the most.⁴⁹

Personal mental health improvement techniques

Outdoor activities have been banned as a result of the COVID-19 epidemic. This does not imply, however, that physical activity should be reduced.⁵⁰ Working out at home is a convenient and cost-effective option that incorporates not just stretching and jogging but also a wide range of virtual and free sporting modalities⁵⁰ that can aid in the treatment of insanity in the current situation. Some of them include meditation, faith, devotion, dramatic brewing and desiccation, pet care, and planting. It has also been emphasized how important it is to stick to a daily routine or plan.⁵¹

Recommendations

Healthcare administrators, emergency services, and medical treatment providers all require realistic government plans to protect against the spread of COVID-19.^{52,53} Throughout the world, testing has concluded or may allow admittance to therapeutic psychological support and training as part of their jobs. In the field of mental health, emergency mental health, psychological first-aid crises and referrals, specific patient needs, alarm and distress therapy, and other evidence-based resources must be connected with emergency response systems. Risk consultation programs should address emerging challenges such as vaccination cost and appropriateness, as well as the need for evidence-based agreements for disease outbreaks. By assisting specialists, psychiatric well-being practitioners may be able to help them communicate their views more precisely. Human welfare and care workers have been devastated by the COVID-19 event. Medical treatment practitioners, on the other hand, play a critical role in assessing psychological needs and offering assistance to patients, psychotherapy providers, and initiatives that should be integrated into the larger pandemic healthcare system. As a result of testing, the number of lifestyle factors for the mental disease has increased. Therefore, it is necessary to gain a better understanding of the epidemic's impact on the elderly and to design a plan to reduce support from loved ones

and the community at large. Several evaluation programs put people who are more vulnerable in danger of social isolation and financial difficulty (due to a lack of work or income), as well as substance misuse (from alcohol and online gambling). Meanwhile, isolation and quarantine may help to reduce some of the uncomfortable symptoms.

Conclusion

The psychological impact of the COVID-19 outbreak on broader negative psychiatric symptoms was discovered to be widespread. This systematic investigation focuses on the relevant risk factors in the high, middle, and low-income populations. According to most studies, the COVID-19 pandemic poses a threat to all countries. In addition to reducing virus transmission, priority should be given to preventing mental problems (such as major depressive disorder, PTSD, and suicide). The government needs to come up with a well-defined strategy to help those who have been emotionally damaged as a result of the COVID-19 outbreak. A combination of public policies that combine viral threat reduction with psychological health risk reduction is urgently needed.

Conflict of Interest

The authors declare no conflict of interest.

Authors' Declaration

The authors hereby declare that the work presented in this article is original and that any liability for claims relating to the content of this article will be borne by them.

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