

Psychology

Impact of COVID-19 Pandemic on Mental Health

A Narrative Review

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COVID-19 is an infectious disease that is serious, lethal, and transmissible. Since December 2019 the aftermath of the COVID-19 has been experienced by millions of global populations in all age groups, i.e., from newborn to elderly, regardless of gender. In consequence, it has triggered widespread apprehension, fear, hopelessness, and stress in the populace. The pandemic has decimated jobs and put at risk millions of livelihoods. The vivid challenges being faced are multifold, e. g., fear, depression, poor physical well-being, economic collapses, educational and professional hardships, domestic violence, family breakdowns, and many more. COVID-19 is a new type of coronavirus that had not been identified in humans previously. There are several behavioral and mental health-related problems increasing in all people due to Coronavirus which are relatively more important than physical well-being. Thus, this paper aims to comprehensively review the current literature on the negative effect of the COVID-19 on behavioral and mental health, as well as pertinent, useful, and effective psychosocial interventions to be provided to the needy and vulnerable brackets of human society. To accomplish this work, relevant and major research papers available on PUBMED and Google Scholar have been searched and reviewed. In addition, a few more chapters and articles (published after the year 2000) have also been reviewed on interventional research to be useful and incorporated. At last, methodological limitations and conclusions focus on a need for more representative research to understand the prevalence of mental health problems among the general population due to pandemics.

Keywords: COVID-19; Behavioral Health; Mental Health; Psychological Interventions; Developmental Stages

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Introduction

THE COVID-19 is a variant form of coronavirus signifies a complicated and communicable respiratory syndrome spread from person to person. Being firstly identified in Wuhan, China, it has spread across the world till date. The new coronavirus was formally named 'SARSCoV-2' by the International Virus Taxonomy Committee, and the virus infected disease was renamed "COVID-19" (1). This pandemic scenario is one of the most common diseases in modern human history of last 200 years, e.g., Cholera (1846-1860), Spanish Flu (1918-1920), Plague (1855-1960), Flu pandemic (1889-1890), Asian Flu (1957-1958), Hong Kong Flu (1968-1969), HIV/AIDS (1981 onwards), Swine Flu (2009), Mumps (2009), MERS-CoV (2012), Ebola (20013-2016), Zika Virus (2015-2016), and now COVID-19 (2). The world poses the biggest danger to public health today, contributing to one of the largest and quickest reorganizations in the world. The pandemic has spread over 185 countries by the end of March 2020, resulting in stress, anxiety, depression, insomnia, denial, rage, fear, unemployment, violence, and severe loss of quality life – including almost all key mental health issues (3). The COVID-19 has impacted and paralyzed our daily lives, political & social stabilities, economic headway (4), family integration and social mobility grimly affecting our physical, behavioral and psychological well-being in line with the definition of health given by the World Health Organization (WHO). Indeed, the Covid -19 pandemic has infected and devastated lives of infants, children, adolescents, adults, older people, students, and frontline staff of health services irrelevant of their socio-economic status and genders. The global spread of catastrophic COVID-19 has induced and sadly increased panic attacks, starvation, emotional shock & deprivation, negligence, abuse, obsessive acts, anxiety and terror, misbehavior, deadly depression, feeling of hopelessness & haplessness, serious mental illness, psychological distress, co- or multiple morbidities worldwide (5). Furthermore, the pandemic is known to cause and heighten stressors, including anxiety and concern for oneself or loved ones, and social activity restrictions due to quarantine, and abrupt and drastic changes in lifestyle. Stressors such as infection concerns, agitation, unavailability of vaccines, insufficient supplies of medicines and PPE kits, unemployment, economic loss, and stigma have been reported in a recent study of virus outbreaks during the pandemic (6). Most of the latest literature on COVID-19's psychological effects has originated from China's earliest hot spots. Although, some studies have evaluated pandemic's mental health-related impacts, however, affected most to health professionals, individuals pre-existing mental and chronic illnesses, teenagers and adolescents, and the general population (7, 8). In India, there is work-related tension, and fear of the future bothering the public and contributing to florid mental distress due to this pandemic. The virus has contributed to the spread of behavioral changes in the form of growing cases of anxiety, depression, domestic violence, drug abuse, and suicidal thoughts, excessive feelings of fear; exhaustion or low energy & decreased self-esteem; change in eating habits; lack of appetite; insomnia; and suicidal thoughts in crucial situations. A significant proportion of the Indian population has complex and insecure living conditions, such as old-aged and disabled people with chronic or

acute diseases, migrant workers and people stuck in places other than their own homes, elderly people in quarantine in homes or public hospitals, and families of those is sick or in quarantine (3, 9).

Thus, the present work is aimed at narratively review major studies pertaining to behavioral and mental health of people of certain age-groups and salient demographic profile exaggerated by the COVID-19 pandemic. The present work would also be exploring and evaluating suggested behavioral and psychological interventions to preventing distress, and promote well-being in general, and emotional & psychological. The authors have thoroughly reviewed major published research within the scope of the title of this paper which are available online, especially on PUBMED and google scholar. Most of the included papers have been published within last one year of spread of the COVID-19. However, few other published interventional research has also been reviewed which have suggested some useful interventional guidelines.

Impact on Children and Adolescent

As the COVID-19 infection spread worldwide rapidly in 3 months after its outbreak, people from all age groups were affected by the pandemic especially children and adolescents. It is very difficult for children and adolescents to adjust to the current changes, and they have their inherent suggestibility to pursue the rumors/myths transmitted on social media sites related to COVID-19 transmission/precautionary steps. This is leading to unnecessary concern, fear, and anxiety about the infection being contracted and can cause a sense of panic among adolescents (10).

According to UNESCO, the pandemic has disrupted the schooling of more than one billion students in 129 countries around the world (11). Lockdowns in India were strictly enforced from March 24, 2020, and since September have been steadily eased, but schools remain closed and classroom teaching has been replaced by online classes. This situation offered the optimal conditions for isolation and increased internet use for children and adolescents (12). While both children are perceptive to change, young children may find it difficult to grasp the changes that have taken place, and irritability and frustration may be displayed by both young and older children.

In the world, more than 2.2 billion children make up about 28 percent of the world's population. Individuals who aged from 10 to 19 years make up 16% of the world's population (13). Coronavirus disease 2019 (COVID-19) in children and teenagers may not be as deadly as it is in adults, but this age group causes a lot of psychological distress. Due to parental anxiety, interruption of everyday activities, increased family abuse, and home confinement, adolescents encounter acute and chronic stress with little or no access to friends, educators, or physical activity. The COVID-19 crisis has obstructed both parents and children's psychological well-being through at least four mechanisms: loss of parental jobs, loss of income, the burden of care, and illness. These processes have been directly connected to the well-being of both adults and children (14).

Quarantine has an adverse effect on the mental health of individuals, including post-traumatic stress symptoms, confusion, and anger (6). Quarantine also imposed proximity will

especially affect teenagers and their families, as adolescents tend to become independent and focus more on socializing and spending more time with friends than their families (15). The pandemic and lock-down period during COVID-19 outbreak have caused a sense of panic and anxiety around the world. Nonetheless, the pandemic and confinement have contributed to several short and long-term psychosocial and mental health consequences for children and adolescents. Vulnerability factors such as developmental age, educational status, pre-existing mental illnesses, being economically disadvantaged, or being quarantined due to infection or fear of infection decide the quality and extent of the effect on minors.

It has been shown that this pandemic will appear to have increased long-term adverse effects for children and adolescents relative to adults (16). Center for Disease Control and Prevention (CDC) advocated its reliable psychological and social impacts. The pandemic is imminent, and it is necessary to take measures to create resilience and cope with the pandemic's harmful consequences. Grubic, Badovinac, and Johri (2020) suggested, it is a timely call, for studies investigating the effect of COVID-19 on the mental health of students and the need for urgent action (17).

Impact on Older Adults

As the 2019 coronavirus disease (COVID-19) started to spread all over the world in early 2020, older adults encountered excessively higher pandemic adverse effects, including more serious health complications, and higher mortality rate. In older adults and adolescent families, negative mental health consequences due to social isolation can be especially prominent, since these populations are already at risk of depression or suicidal ideation (5). People aged 41-50 years received lesser support from friends and family and were less likely to share their feelings with them than members of other age groups (18). Loneliness is a recognized factor that has a detrimental effect on the mental health and well-being of an individual, and certain older adults are now at greater risk of experiencing it. To maintain a healthy social circle, declining health or the death of partners and friends can get in the way. The pandemic and the quarantine, however, increase this risk of isolation. Older adults have become ever more reliant on their caregivers during the pandemic, and some caregivers have used the pandemic to further exert their power and abuse, in a trend similar to the one that has increased the rates of domestic violence. Hamm, Brown, and Karp 2020 conducted a mixed-method study involving 73 older adults with documented depression or anxiety showing resilience (i.e., no worsening of symptoms) 2 months after the beginning of the pandemic, researchers noted that participants in the study seemed to be immune to the impact of isolation, particularly social interaction, and access to mental health care (19).

A cross-sectional study involving 3,840 older adults from Spain aged 18 to 80 years noted that older ages (60-80 years) were associated with lower rates of anxiety, depression, and posttraumatic stress disorder relative to younger ages (40-59 years) (PTSD) (20). Older people are more likely to already have underlying problems such as cardiovascular disease, diabetes, or respiratory disease-comorbidities that we already know increase the risk of serious death associated with COVID-19.

Furthermore, elderly people have numerous comorbidities and increased hospitalizations that increase the risk of infection during a pandemic. In addition, a potentially weaker immune system makes it harder for older adults to fend off infection. A longitudinal study in the Netherlands involving 1679 older community-dwelling adults (65-102 years) found that while isolation increased after the pandemic, levels of mental health remained unchanged before and after the pandemic started (21).

According to Mukhtar (2020) in older adults with prevalent depressive symptoms, mental health issues are inevitable. The rapid infectious spread, higher mortality rate, self-isolation, social distance, and quarantine of the COVID-19 pandemic outbreak could escalate the risk of mental health issues (22). The main offshoots are health anxiety, panic, adaptation disorders, depression, chronic stress, and insomnia. The elderly is particularly vulnerable amongst them (23). While a significant strategy to combat COVID-19, social distance is also a major cause of loneliness, particularly in settings such as nursing care or old-age homes, which are independent risk factors for depression, anxiety disorders, and suicide. Understanding the variables and processes that drive this resilience will direct approaches to action for other elderly people and other groups that may be more seriously impacted by mental health, such as increasing components of wisdom such as emotional control, empathy, and compassion (24).

Adherence to social isolation methods could be weakened over time, and the aggravated morbidity of COVID-19 associated with affective mental health disorders in older adults could be effectively avoided by such well-timed, reinforced preventive interventions. However, to understand the psychological and mental health consequences of the ongoing COVID-19 pandemic among the older population, close monitoring, and additional study would be required. A cross-sectional analysis of 515 community-dwelling adults (20-79 years) in the US noted that low level of COVID-related anxiety among older adults was associated with the use of constructive precautionary measures such as avoiding people who cough, excessive travel, and the use of public transportation or public places (25).

Impact on Single Child and Parenting

The COVID-19 pandemic and the associated social interventions could also affect parenting styles, such as the amount of conveyed warmth and criticism. Typically, parental warmth is one of the key aspects of responsive parenting behaviour and may include approval, encouragement, and positive interaction with the infant (26). COVID-19 provides families with specific stressors, as well as cumulative threats including social, economic, and health-related stressors (27). If someone is parenting a single child, when an online class is not in session, there is a particular challenge to keep the child occupied. The fact that since their child met other kids his age, it has been close to 8 months. So, they juggle between work and household duties and hope to carve out enough time to entertain their little one. There is no doubt that the lockout phase hampers children's prospects for social, cognitive, and emotional development. It can be particularly difficult for an only child who can depend solely on his parents to be their new playmates in the absence of daily school sessions and play dates. When a child is cooped up at home,

with only two adults to keep him company, he may start to miss the physicality and experience of being around other children sooner or later. Parenting habits, such as the amount of conveyed warmth and criticism, may also be influenced by the COVID-19 pandemic and the associated social interventions. When the lockdown was declared, single parents saw their primary support structures fail, colleges, daycare, and the community, doing double the job with half the assistance. They also experienced mental health challenges with grit through the pandemic and discovered fresh insights on parenting.

Impact on Mental Health of Students

The pandemic has evidently affected the higher education sector, which is a crucial determinant of the economic future of a nation. Efforts to reduce the spread of the virus and limiting the extent of the pandemic has led to an unprecedented amount of Physical distancing steps with national lockdown and lockdown measures in-place shelter. As a result, schools and colleges have been forced to shut down and switch to online formats of learning, prolonging social alienation, and growing student academic stressors. Previous studies have shown that college students are negatively affected by epidemics and thus feel compounded negative emotions due to school closures (28). A large number of Indian students, second only to China, enroll in universities abroad, especially in the US, UK, Australia and China, countries worst affected by the pandemic. Several such students have now been banned from leaving their educational Institutes and nations. The infamous COVID-19 has developed a long-lasting effect from which it will take several months to recover, if not years. The education industry has not been left out and the student life effect of COVID-19 is clear. A study Jihan et al. (2012) has shown that students display symptoms of stress, anxiety and depression between the ages of 16-25. Whether it's students' personal lives or the school and college setting, the coronavirus pandemic has changed things that have never been thought about before (29). leading impediment to academic achievement is mental health problems. Mental illness may affect the motivation, attention, and social interactions of students, which are critical factors for students to succeed in higher education (30). Nelson Pettitti et al. (2020) have found high level of anxiety, worries and depressive symptoms among general population samples in North America and Europe (31). It is anticipated that the continuous spread of novel coronavirus (COVID-19), strict isolation measures and delays in starting schools, colleges and universities across the nation will affect the mental health of university students. However, there is little evidence of the psychological or mental health effects of the current pandemic on college students, who are known to be a vulnerable population, except for a few reports, particularly from China (32).

Impact on Mental Health of Employees

The pandemic undermines not only physical health but also individuals' psychological resources and resilience (33) In a highly interrelated and globalized world, the impact on a social and economic level have become evident since the outbreak. Individuals have lost their jobs, facing financial constraints, and their routine were on halt (34). Aspects of the workplace can play a crucial role in moderating or degrading the mental health

of people experiencing this pandemic scenario. The world has shifted to online and most of the workplace adopted work from home. Individuals who were working, exhausted and trying to juggle several personal and professional commitments from home, contributing to a rise in anxiety, depression, and burnout. Leaders must resolve the mental health issues faced by workers to ensure that businesses and their staff perform optimally, not just present, during this period. Before COVID-19, some office dwellers may have been excited by the opportunity to work from home, without commuting, a convenient atmosphere, and the freedom to plan your workday around other obligations. But during the pandemic, considering the realities of doing so, working from home has lost its appeal to many people.

Any professional and administrative variables could play a crucial role in aggravating or curbing the impact on the mental wellbeing of people in this pandemic scenario. Rajkumar (2020) found that the pandemic may have serious consequences on the general population and workers' mental health (3). Experts point out that both persons who have already had psychological issues and those that have never had symptoms can be at risk. The different psychological issues that can occur after the emergency phase of the acute corona virus has passed are not given the requisite attention. In this way, the existence of another "pandemic" around the world related to the emergence of potential mental illnesses is at risk of being observed. In a recent report, Gunnel et al. (2020) made detailed forecasts as to how the pandemic's mental health consequences could, in turn, have a substantial psychological impact on the population (35).

COVID-19 on Children with Disabilities

Findings suggested that frontline healthcare workers, individuals with physical and mental health vulnerabilities are more likely to experience psychological issues (36). There is evidence that the consequences of social distancing and confinement can have a greater impact especially on disadvantaged groups, such as individuals with disabilities, underlying medical conditions, or other forms of social risk factors, like children at risk of maltreatment or in foster care (37, 38).

Maintaining a routine creates a sense of consistency and safety in children, which is necessary for their emotional and psychological development. Adjusting habits, such as closing schools and day care facilities, social distancing and/or home confinement, can prove to be a real battle for children with physical and mental disabilities (39). It has contributed to a lack of everyday routine and order, usually referred to as social distancing or social isolation. While online classes prove to be helpful for most students, little is discussed about their psychological effect on children with disabilities. Given the current scenario, children with pre-existing mental and physical conditions are at maximum risk. Many online platforms of learning are not compliant with assistive devices used to educate visually disabled children or those with difficult hearing (40). For children with such physical difficulties, the complexities of online learning combined with a lack of leisure opportunities that can be performed at home can prove to be discouraging. In addition, one of the toughest challenges for children with autism spectrum disorder is the growth of social skills and social interaction. Tandon (2020) found the relationship between psychological

issues and COVID-19, experiencing negative feelings, mood swings, and changes in children's sleeping routine and eating habits placed them at increased risk of developing mental health issues and high chances of relapse (41).

UNESCO (2019) advised the prioritization of medical treatment for those affected by the pandemic, along with the closing of mental health facilities, is a source of tension, anxiety, and fear (42). In India, 7.8 million children between the ages of 0-19 have physical or mental disabilities and one-fourth of them do not attend any educational institution. The United States, on the other hand, has seven million children between the ages of 3 and 21 who have offered special education classes at school (43). Shifting online classes leads to a shortage of special education support for children because parents are unable to replace teachers with special education because there is a lack of assistive technology. This influences the growth of kids with Specific Learning Difficulties (SLD), Down Syndrome, etc. In preparing for this pandemic, along with the creation of a global leadership, the lives of children with physical and mental disabilities need to be internationally understood and prioritized.

There is an extended burden for parents as they are playing various roles amidst the current situation. Stress faced by parents can affect their kids negatively. One of the greatest obligations of parents of young children is to clarify them the current situation as transparently as possible, as successful communication (44). Parents should try to spend quality time with their kids. As an urgent priority, a system of online clinics and informal therapeutic interventions should be set up to reduce the impact of COVID-19 on children with mental health problems (45). Effective steps should be taken to seek both immediate and long-term solutions to combat this issue. It is crucial to undertake international studies on the impact of mental health on children with physical and mental disabilities and explore long-term solutions to resolve this issue. UNICEF recommendations that include support for children with disabilities during COVID-19 can be successfully implemented as an urgent solution (46).

Conclusion

A lethal psychological effect has been triggered by sudden lockdown followed with the social isolation for a prolonged period, combined with the emotional and financial losses suffered during the lockdown. The psychological issues have been

exacerbated during the pandemic and confinement period. While mental health effects are likely to be seen in people of different ages due to the lockdown, the impact of confinement across extended periods may vary across vulnerable groups.

Many times, society must face different kinds of threats, multiple epidemic outbreaks have occurred in the past, and numerous lives have been lost. We are going through just another such process in 2020, and as a popular philosopher said, "this too will pass," one day the havoc created by the COVID-19 will be regulated. We will have to change our life agreement until the moment that this occurs. Now, it is difficult to estimate the entire effect of COVID-19 on the lives of people, as we are still dealing with the pandemic each passing day, new problems are emerging. To improve their active involvement in the preventive processes with regard to the spread of the pandemic, there is a need to expand the knowledge base among individuals. The Indian socio-cultural dimensions need to be elaborated, so that society begins to understand social distancing and willingly adopt it. The adaptability of people with resilience to livelihoods should be enhanced to enable them to defend themselves not only from the current pandemic, but also from any other unexpected diseases and to provide patients with treatment.

Suggestions

COVID-19 pandemic and prolonged confinements and lockdown have an impact on every individual. The result of much research will assist mental health policymakers to devise disaster response strategies to meet citizens' mental and emotional needs during such emergencies, to address the adverse effects of the pandemic, particularly the lockdown. The role of developing and employing preventive and therapeutic interventions become crucial. Psychological interventions such as cognitive behavioral therapy (CBT) and mindfulness-based therapies (MBTs) can be beneficial during COVID-19 to relieve psychological symptoms. In addition to that, the need of urgent consideration should be given to the vulnerable communities, such as women, elderly, and children with mental illnesses and disabilities. However, the root causes of the psychological distress could not be same for everyone, hence, the role of intersectionality and other psycho-social factors should be explored rigorously. The present literature review will help to prepare effective strategies to improve mental health of vulnerable populations most affected by COVID-19. ■

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