



Perspectives

Psychological Effects of COVID-19

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Abstract

This research provides a detailed review and analysis of the data and research available online regarding the emotional and psychological impacts of COVID-19 on people of different age groups. The purpose of this review article is to identify and highlight the deep infiltrating and all-encompassing toll to the global mental health that this pandemic is causing in addition to the decline in physical functional health.

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Introduction

Since beginning, epidemics and pandemics of infectious diseases, including Spanish flu, Hong Kong flu, Bird flu and HIV/AIDS have threatened human life.¹ Large scale epidemics afflicting millions of people around the globe are known as pandemics. A pandemic should not simply be associated with the spread of organisms but the associated series of psychological responses of the community are also important to understand the spread and containment of such infections. Psychological mind frame of a given population in a pandemic is directly related to the complexities of their reaction, which should be taken into serious consideration. Currently, the world is experiencing another pandemic called COVID-19 which has generated widespread anxiety and fear among people. It is associated with symptoms of mild to complex pneumonia, acute manifestation of inflammation characterized by cough, high grade fever, dyspnoea and multiple organ failure.² COVID-19 was first reported to be epidemic on December 12, 2019 in Wuhan city, Hubei Province, China. Within

four months of its emergence, the novel corona virus had spread to more than 210 countries, infecting more than 3 million people, which led World Health Organization (WHO) to declare it as a health emergency and a global pandemic.

Cognitive Strain of Isolation:

As a result of rapid spread of this highly contagious infection, thousands of casualties and expected exponential spread have led to "Lockdowns" in many countries. In real life, when encountered with such conditions, individuals seek altruistic content and reinvent social norms. This situation profoundly affects personal as well as social life, including way of working, eating, shopping, socialization and future plans. Closing of schools and restaurants, urging communities to stay at their homes and avoiding public gatherings, cinemas, play grounds and sports venues created unrest in our society.³ Health care authorities quarantined citizens and asked them to stay at homes to curtail the spread of infection.⁴ Moreover, these sudden unaccustomed steps taken by the authorities have resulted in escalation of the risk of affecting mental health of the society.

Worldwide researchers have put their prior focus on diagnosis, prevention (vaccine) and treatment. Healthcare authorities are also working on few core areas like a) impact of social and economic crises b) psychological distrust and above everything else c) the mental trauma caused by morbidity and bereavement. It has been investigated that increase in fear decreases the sense of clear and rational thinking and the ability to react sensibly to situations⁵. On one side, media highlights the impact of these changes in our lives caused by this unforeseen crisis but on the other hand, reporting of the number of deaths and proliferation in number of new cases heightened people's frustration, pervasive anxiety, fear of falling sick and helplessness over the situation. Furthermore, another long term complication of specific and uncontrolled fear of the COVID-19 outbreak is an increase in racism, boredom, isolation which have been suspected to impair quality of life, adjustment disorders and depression. This self-isolation may also associated with alcohol and drug abuse.⁶ Certain people are more prone to the psychological effects of pandemic such as those who themselves or their loved ones have been attenuated with disease, those at preexisting risk (immunocompromised, elderly patients with other health complications), people with psychiatric problems, or substance abuse problems are at higher threat for antagonistic psychosocial outcomes.⁷ Both pervasive isolation and obstruction behaviours seem to be affiliated with loss of daily activities, inability to take part in social activities enhancing risk of hopelessness which may lead to suicidal conduct in this context. It has been reported that healthy/ uninfected individuals are very much afraid of meeting with COVID-19 patients⁽⁸⁾. Previously, it has been observed that patients or their families who are quarantined may face guilt and subjected to shame by the society at large.⁹ Social effect of quarantine period such as unemployment, domestic violence and breakdown of relationships (breakup/ divorce) may result in negative psychological behaviour including intolerance or uncertainty, leading to social hostilities. Complications in psychotic levels are further associated with the widespread use of steroid therapy by the general public to modulate the inflammatory symptoms in day to

day life; psychotic symptoms may get aggravated by the use of steroids.¹⁰ COVID-19 patients with psychosis need special medical attention in hospital facility. It has been reported by the clinicians that for such group of people, it is very challenging to maintain physical distance in order to control the infection and the proper provision of treatment to them might be challenging too.

Psychological Hardships for Health Providers:

Healthcare systems in most of the countries were quickly overwhelmed as number of the people with flu-like symptoms thronged the hospitals. Frontline medical and paramedical staff who are in direct contact with infected patients are at a greater risk of contracting infections than others. Most of the health workers isolated themselves from their families for the welfare of their own households. Previous studies pointed out that during outbreak of infectious diseases and natural disasters, nurses compromised their own needs and actively contributed to control the infection out of their professional duty.¹¹ Some reports have shown that in China, front-line health workers of COVID-19 experienced severe psychological problems and needed time to recover their psychological health.¹² The most common psychological distress in front line health workers are anxiety, insomnia, depression and distress. Additionally, long working hours, unavailability of the essential Personal Protective Equipment(PPEs) and high rate of transmission of infection among health care workers exacerbates an already tensed situation.¹³ COVID-19 has had an impact on the services sector such as education (undergraduate and post-graduate) as well. Non-COVID related postgraduate researches have been withheld. National research funding bodies in various countries like UK and USA have halted non-COVID related funding.

Compromises on the Basic Needs:

The pandemic had effects on core needs for example food and shelter as well. The world witnessed that as the pandemic progressed, it affected food security by means of its availability, access and nutritional content of available food. Global lockdown has obstructed the farm to market food chains, including scre-

ening, production, delivery and utilization. Growth and development in the children is greatly associated with adequate provision of nutrition. A survey reported that 40.9 % of mothers having <12 year old children were skipping meals because they could not afford food.¹⁴ Food insecurity has also been associated with stress, chronic starvation, mental health problems and death. Policy makers and key stakeholders need to establish a global response to counter the insecurity of food in pandemic that has the potential to result in malnutrition and hunger.

Psychological Distress and Grief:

Different epidemiological studies have been conducted on pervasiveness of fear, anger and post-traumatic stress disorder among the families whose funerals were held without the presence of their loved ones. Generally, old age patients are very reluctant to take medications and have a low desire to live. Such complications may result in the worsening of COVID-related symptoms in elderly patients especially the ones who have lost their beloveds. Studies have shown that dealing with this type of loss during this on-going health crisis may be very exhausting.

Psychological Effects of COVID-19 on Young People:

The youth, although not directly affected physically in much severity from the ramifications of the pandemic, still constitute the part of the population that has endured the harshest and the most long-standing adverse mental and emotional stress complications.¹⁵ Be it children or teenagers or the young adults, the effects have been all encompassing. The consequences of long-standing isolation, lack of productive exposure, disturbances of sleep, food, education and work have all contributed to the deterioration of mental well-being in the most emotionally susceptible faction of the society. All of this coupled with the fact that youth's mental health is such an under-researched and under-exploited subject only adds to the gravity of the situation and the dire need of effectively looking into the issue.¹⁶

Effects of the Pandemic on School Going Children:

According to UNESCO, about 90% of enrolled learners have been out of school during the active months of the pandemic. A research conducted on children and adolescents in the Chinese province of Hubei, the hardest hit province in the whole of China children of all ages especially in the age group of 7-12 years showed increased symptoms of anxiety, depression and agitation most of which were caused by stripping them of their school routines, prolonged isolation and especially important factor being all the family members locked up together in homes. Another important and potentially dangerous trend found was smartphone addiction and excessive increase in digital time.¹⁷ Both male and female children showed varying but increased percentage of their time spent on gadgets owing to the inability to invest their time in healthier outdoor activities and better and fruitful social interactions.

The Impact on Mentally Challenged Children:

Children already suffering from any kind of mental illness have also had a complete disruption of their normal routines which were necessary for the sustainable development of their personalities. According to child psychologists, more and more children with mental challenges have shown the tendencies towards aggressive behaviour, emotional breakdowns and refusal to comply with normal eat and sleep routines. Especially susceptible to this inclination are children with Autism Spectrum Disorders who have been showing increased symptoms of anxiety, depression and short-temper to the immediate caregivers.¹⁸ A very big downside of the whole scenario is the disruption of routine therapy sessions and other modes of rehabilitative measures that these children were being provided with. Because of this discontinuity, the impending and expected improvement objectives have further been delayed.

Psychological Challenges faced by Young Adults:

Young adulthood is a time of numerous transitions in life be it cognitive, emotional, social or emotional and that coupled with the fact that people in their pubescent or post-pubescent and even young adult stages are more fragile, emotionally and psychologically, further urges us to pay the due attention to

this matter. Young people face a bigger hurdle coping and acclimating to the changed social atmosphere in the wake of the pandemic as compared to older adults who have far more developed coping abilities. A research exploring psychological growth curve patterns in the Italian youth during the COVID-19 pandemic showed increased propensity of emotional strain and psychological distress and exacerbation of existing problems too. A significant number of youth population in the selected sample showed symptoms of anxiety, depression, rule-breaking behaviour and externalization and internalization tendencies.¹⁹ Apart from the primary adverse effects, another very important issue is the financial uncertainty of the situation and the impending economic recession. Young people, who were about to enter the job market just after completing their education or training, are under an excessive pressure to find employment but the recent economic depression has made it extremely difficult. This has further led to increased agitation, hopelessness and disappointment towards the prevailing atmosphere. This feeling of apathy and fear of the impending financial burden amplifies the distress and may lead to extreme feelings and self-destructive behavior.²⁰

Psychological Distress Faced by Expectant Mothers during COVID-19:

Depression affects one in seven women in the pre and perinatal period and is associated with an increased risk of pre-term delivery, decreased mother infant bonding and delayed emotional/cognitive development of the new-born which may have long lasting effects in childhood.^{21,22} The COVID pandemic has created its own share of problems for the pregnant mothers too. Even if the physical toll created by it is kept aside, the financial, social and emotional distress created by it, has had detrimental effects on the mental health of expecting mothers. Research conducted between the month of April and May 2019 in Canada upon chosen samples of expectant mothers has shown a significant rise in self-reported levels of depression and anxiety.²³ A considerable amount of this anxiety owes to the fact that the lock down situation has decreased access of expecting moms to ade-

quate gestational health-care facilities and routine prenatal care visits. The fear of not being able to access any hospital facility in case of any gestational emergency is also a big one. In the hardest hit areas of China including Wuhan, a considerable number of mothers have been reported to change their decision for the mode of delivery they want with most of them changing in favour of caesarean sections.²⁴ These types of decision changes are indicative of the deep and long term impact of the pandemic. This whole situation coupled to the fact that social curtailment measures have decreased any physical exposure and activity that might have proven therapeutic to pregnancy related depression is an additional downside to the situation. Most of the mothers are also reluctant to take anti-depressant medication during pregnancy and the whole scenario has turned out to be rather disappointing with respect to their mental well-being.

COVID-19 Pandemic and Substance Abuse:

A very important but often overlooked issue in the situation created by the pandemic is that of alcohol and substance abuse tendencies. In general population worldwide, the anxiety, fear and social isolation has led to increased inclination towards alcohol and illicit drugs intake.²⁵ In addition to that, particularly noteworthy in this aspect, is the case of people already suffering from Substance Use Disorders (SUD). The disruption in global drug supply chains due to travel restrictions has had a direct effect on these users. Inability of access may lead to these addicts shifting to more illicit and dangerous choice of street drugs in their desperation. Surveys have noted spikes in online sales of Cannabis and the illicit sales of benzodiazepines and medical opioids have also been noted to rise.²⁶ Along with these potentially lethal shifts, another very important factor is that isolated drug use by addicts carries a far greater risk of overdose and related life-threatening complications when access to emergency medical, in such a case, will also be difficult and owing to social isolation the chances of having people around who can administer antidotes or naloxone etc. to the overdosed patient are also

very slim. All of this creates a far greater risk of substance abuse or overdose related deaths during the pandemic.²⁷

The Risk of Spike in Suicide Rates:

Social isolation, fear of infection and post survival anxiety are the most predisposing factors which may have led to COVID pandemic related rise in suicide rates in the community.²⁸ The degree and types of psychological challenges that can and may have led to this extreme behaviour in people are unprecedented and this precisely is the most lethal aspect of the situation. The depression surrounding loneliness or the fear of loneliness and then the anxiety of being infected or of a painful suffering following the infection are the prime reasons that suicidal behaviour finds refuge in minds. Particularly susceptible are people already suffering from some kind of psychiatric disorder, emotional distress or even physical ailment. Along with this, people living with alcohol and substance abuse tendencies are a major risk group. Alarming, multiple cases of COVID related suicides have been reported in the USA, UK, Germany, Italy, Bangladesh, India and other countries. For instance, a 66 years old man with throat cancer hanged himself in New York City after testing positive for coronavirus.²⁹ Similarly, a 36-year-old Bangladeshi man took his life upon suspecting his being infected with coronavirus because his villagers thought so too.³⁰ This and so many other cases are continuously raising the mental health alarm that this pandemic has triggered. Also, there has also been a documented rise in calls to suicide prevention hotlines in the USA during the pandemic.³¹

Conclusion:

Pandemics, over the course of human history, have been known to have far-reaching impacts in terms of the emotional and societal well-being of the populace. Similarly, for COVID-19, although the physical risks seem to be the top most priority presently, we simply cannot avert our attention from the deterioration of mental health that this pandemic is certainly going to cause. As a society, we have now more than ever a far greater responsibility to attend to all the

aforementioned quarters and to identify the high-risk groups be it health care professionals, young adults, mentally challenged people and those living with addictive and self-destructive tendencies. Identification of the problem followed by its efficient curtailment is the key to salvage and restore the emotional morale of the society and to not let the pandemic wreak any more havoc than the physical wreckage that were already fighting.

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