



Impact of Covid-19 Pandemic: A Review of Coronavirus Disease on Human Health during Crisis

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Abstract

Covid-19 is an infectious disease caused by a newly developed coronavirus. It was declared a pandemic by World Health Organisation. People infected with Covid-19 virus experienced mild respiratory illness and recover without requiring any special treatment. But older people, children, people with weak immunity, and people with underlying medical problem like diabetes, cancer, chronic respiratory disease etc, are likely to develop serious health problems. Corona warriors have shown great vigor, courage, and aggressiveness in fighting with coronavirus disease. Isolation and quarantine are the public health practices used to protect the public by preventing the exposure of contagious disease. Infections caused by these viruses are an enormous global health threat. They are a major cause of death and have adverse socio-economic effects that are continually exacerbated. The perceived impact of Coronavirus Disease (COVID) -19 pandemic has resulted in the world-wide spread of physical, mental, psychological, economical and social problems. This pandemic has affected millions of people, who are either sick or are being killed due to the spread of this disease. Hence, apart from the medical support, the patient may need psychiatric help also.

Keywords: Covid-19, Pandemic, Health, Crisis, Quarantine, Isolation, Lockdown.

I. Introduction

The word “weiji” in Chinese language, contains two characters, which taken together, connote the concept of “crisis”. The first character, wei, indicates a critical or dangerous situation, while the second one, ji, means an opportunity for change. Thus, these characters together indicate that crisis is a point in time that allows the opportunity to change (Ehly, 1986).

A crisis may occur when an individual is unable to deal effectively with stressful changes in the environment. A stressful event alone does not constitute a crisis; rather, crisis is determined by the individual’s view of the event and response to it. If the individual sees the event as significant and threatening and has exhausted all his/her usual coping strategies without effect, and is unaware or unable to pursue other alternatives, then the precipitating event may push the individual toward psychological disequilibrium, a state of crisis (Caplan, 1964; Smead, 1988).

A crisis is any situation in which a person's behaviours puts them at risk of hurting themselves or others and/or when they are not able to resolve the situation with the skills and resources available. A mental health crisis is as important to address as any health crisis. It is difficult to predict when a crisis will happen. While there are triggers and signs, a crisis can occur without warning. It can occur even when a person has followed their treatment or crisis prevention plan and used techniques they learned from mental health professionals ([Minnesota, 2010b](#)).

As the Coronavirus Disease (COVID) -19 pandemic rages on, health of both infected and non-infected person is a rising concern. The results indicate an urgent need to prioritize the establishment and implementation of mental health and psychosocial support tailored to family, close relatives, and friends of COVID-19 patients ([Yuta et al., 2020](#)). The COVID-19 pandemic is a significant threat to humanity. The pandemic is straining our physical-mental healthcare and human lifestyle in ways that are significant and obvious. The causes of mental health effects in the context of COVID-19 are multi-factorial and likely include biological, behavioural and environmental determinants ([Sarah et al., 2020](#)).

Disruption of lifestyle rhythms due to prolonged home quarantine as a counter-measure against COVID-19 may increase psychological distress which might result in the risk of developing mental illness even in healthy individuals without a medical history ([Liu et al., 2020](#); [Qiu et al., 2020](#)). From a public health perspective, there is strong justification for such interventions – physically separating people is an effective strategy for preventing the spread of infectious diseases, including COVID-19 ([Flaxman et al., 2020](#); [Thakkar et al., 2020](#)). Given the recent and sudden emergence of COVID-19, research in this area is understandably limited. However, several studies during the initial COVID-19 outbreak revealed associations of COVID-19 with increased anxiety, depression, and stress ([Cao et al., 2020](#); [Wang et al., 2020](#); [Zhang et al., 2020](#)).

Infections caused by these viruses are an enormous global health threat.

Mental health is a state of mental well-being in which people cope well with the many stresses of life, can realize their own potential, can function productively and fruitfully, and are able to contribute to their communities. Psychological well-being is influenced by a variety of social factors such as dignified and safe provision of overall aid. Mental health and social problems in emergencies are interconnected ([WHO, 2017](#)).

Mental health has large intrinsic value as it relates to the way we interact, connect, learn, work and experience suffering and happiness. Good mental health supports the capability of individuals to display healthy behaviour that keeps themselves and others safe and healthy during the pandemic. Good mental health also facilitates the performance of people in key roles within families, communities and societies, whether taking care of children and older adults or contributing to their community's economic recovery ([Birla et al., 2022](#)). The COVID-19 pandemic has resulted in the world-wide spread of physical, mental, psychological and social problems among people. Nervousness, fear of infection, restlessness, behaviour seeking constant reassurance and sleep disturbance are the main factors of depression and anxiety in people during pandemic. Governments and communities can ensure that mental health and psychosocial well-being are protected ([Birla et al., 2021a](#)).

COVID-19 is an infectious disease caused by the recently discovered coronavirus. It is considered as the most crucial global health calamity because the impact is associated with greater health anxiety of the people in common. COVID-19 pandemic has caused a lot of uncertainty in the lives of Indian public, just like their global counterparts. During COVID-19 crisis a significant proportion of them have had a psychological impact.

Here mental health crisis has been described in the light of COVID-19 pandemic.

1. What Causes Mental Health Crisis?

Many things can lead to a mental health crisis. Increased stress, physical illness, problems at work or at school, changes in family situations, violence in the community or substance use may trigger an increase in behaviours or symptoms that lead to a crisis. These issues are difficult for everyone, but they can be especially hard for someone living with a mental illness.

Here are some examples of situations or stressors that can trigger a mental health crisis (Minnesota, 2010b).

1.1. Home or environmental triggers

- i. Changes in relationship & friendship with boyfriend, girlfriend, partner, spouse.
- ii. Loss of any kind: pet, family member or friend due to death or relocation.
- iii. Poverty/Unemployment.
- iv. Community violence.

1.2. School or work triggers

- a. Mounting pressures, anxiety about deadlines.
- b. Worrying about upcoming projects or tasks.
- c. Abuse of drugs or alcohol.
- d. Feeling of loneliness (Lee et al., 2019).
- e. Discrimination.

2. What Are Health Risks?

The mental health and psychosocial consequences of disasters may be of a predominantly social or psychological nature. While this is an effective way of classifying the issues into domains, this should not undermine the interconnectedness of mental health and psychosocial wellbeing (Van et al., 2005).

2.1. Social

- a). Pre-existing (pre-emergency) problems e.g. belonging to a marginalised group, political

oppression – these vulnerabilities may be exacerbated in emergency situations.

b). Resulting from the emergency e.g. reduced safety, separation from family members, destruction of livelihoods, destruction of community structures, displacement.

c). Circumstances created as a result of humanitarian aid e.g. overcrowding or lack of privacy in camps, aid dependency, undermining of local capacity.

2.2. Psychological

a). Those induced by the emergency situation such as grief; non-pathological distress; alcohol and other substance abuse; depression and anxiety disorders including post-traumatic stress disorder.

b). Those arising as a result of circumstances created as a result of humanitarian aid, such as anxiety due to lack of information about food distribution.

c). Pre-existing (pre-emergency) e.g. severe mental disorder, depression, alcohol abuse.

3. What Are Warning Signs Of Mental Health Crisis?

Sometimes family, friends or co-workers observe changes in a person's behaviour that may indicate an impending crisis. Other times the crisis comes suddenly and without warning. You may be able to de-escalate or even prevent a crisis by identifying the early changes in a person's behaviour, such as an unusual reaction to daily tasks or an increase in their stress level. It may be useful to keep a journal or calendar documenting what preceded the behaviours that are of concern (Minnesota, 2010a).

Some warning signs of mental health crisis include:

3.1. The person has inability to cope with daily tasks

- Doesn't brush teeth / doesn't bathe
- Refuses to eat or eats too much
- Sleeps all day or doesn't sleep

3.2. The person shows increased agitation

- Makes verbal threats and has violent behaviour
- Destroys property
- Is cruel to animals

3.3. The person displays abusive behaviour

- Cuts, burns, self-injurious behaviours
- Uses or abuses alcohol or drugs
- Hurts others

3.4. The person loses touch with reality

- Doesn't understand what people are saying
- Unable to recognize family or friends
- Has hallucinations

3.5. The person has rapid mood swings

- Suddenly happy or calm after a period of depression
- Increased energy or depressed mood
- Inability to sit still, paces

3.6. The person isolates from school, family and friends

- Stops attending school & doing homework
- Little interest in activities
- Changes in friendships

3.7. The person has unexplained physical symptoms

- Increase in headaches or stomach aches
- Facial expressions look different
- Complains they don't feel well

4. Subjects Studied

Psychological distress in populations is widespread. In case of COVID-19 pandemic many people are distressed due to the immediate health impacts of the virus and the consequences of physical isolation. Many are afraid of infection, dying, and losing family members. Individuals have been physically distanced from loved ones and peers. Millions of people are facing economic

turmoil having lost or being at risk of losing their income and livelihoods. Frequent misinformation and rumours about the virus and deep uncertainty about the future are common sources of distress. A long-term upsurge in the number and severity of mental health problems is likely. Moreover, specific populations groups are showing high degrees of COVID-19-related psychological distress.

❖ Frontline healthcare workers have been exposed to numerous stressors and ensuring the mental health of healthcare workers is a critical factor in sustaining COVID-19 preparedness, response and recovery.

❖ In every community, there are numerous older adults and people with pre-existing health conditions who are terrified and lonely.

❖ Emotional difficulties among students are exacerbated by family stress, social isolation, with some facing disrupted education and uncertainty about their futures, occurring at critical points in their carrier orientation.

4.1. Effects on Health Care Workers

The COVID-19 pandemic has thrown an unprecedented challenge for mental health across the country. The possibility of getting infected with COVID-19, an illness with no clear defined treatment protocols and uncertain outcomes has shaken the world. With the illness now spreading in different parts of the country, the existing health care systems are really stretched. As the battle becomes long-drawn, the health care workers in the frontline have become particularly vulnerable to mental stress (UNPB, 2020).

Indicators of Mental Health Difficulties at Work Place

-) Impaired physical capability and daily functioning.
-) Changes in communication with co-workers.
-) Reduced job performance and productivity.
-) Reporting to work intoxicated.
-) Restlessness/irritability.
-) Poor memory.

Sources of Anxiety

-) Fear of exposure to self and transmitting to family.
-) Concern regarding personal protection equipment.
-) Fear of family welfare if requiring quarantine/isolation.
-) Uncertainty of extent of support from organisation.
-) Long working hours without consuming a drop of water.
-) Lack of information and communication.

The above mentioned factors can lead to severe psychological distress among health professionals. If not effectively recognised and treated, such stress can transform into more persistent illness, even leading to suicidal thoughts and feelings (NIMHANS, 2020).

4.2. Effect on Elderly Members of Society

As the corona virus disease began to spread, older adults experienced disproportionately greater adverse effects from the pandemic including more severe complications, higher mortality, concerns about disruptions to their daily routines and access to care, difficulty in adapting to technologies like telemedicine, and concerns that isolation would exacerbate existing mental health conditions. Older adults tend to have lower stress reactivity, and in general, better emotional regulation and well-being than younger adults. But given the scale and magnitude of the pandemic, there was concern about a mental health crisis among older adults. The pandemic is causing untold suffering and fear for older people across the world because the mortality rate of older persons is much higher as compared to the rest of the population.

Risk Factors-

a). **Vulnerability**- the people who are aged over 70 or have at-least one underlying conditions (cardiovascular diseases, diabetes, liver problem, etc.) can have severe impact of COVID-19.

b). **Inability to seek immediate medical attention**- lockdown and restrictions to go to hospital to obtain health services for their existing underlying (chronic) conditions.

c). **Treatment strategy**- older persons may also face age discrimination while taking decision for medical care, triage and life saving therapies.

d). **Getting neglected**- the elderly may face neglect and abuse at their homes and hence face mental trauma.

e). **Social isolation**- They are vulnerable to feeling lonely and helpless. They fear that even if they survive the pandemic, social order would change. Some fear worsening of morbidity and deterioration in quality of life.

f). **Misinformation from social media**- Repeated caution, publicized through the media and every other channel of communication like forwarded hoax messages of high risk of potentially fatal complications if infected with COVID-19 virus, increased sense of helplessness and anxiety.

4.3. Effects on School Going Children

The lockdowns in response to COVID-19 have interrupted conventional schooling with nationwide school closures. The educational community have made concerted efforts to maintain learning continuity during this period, children and students have had to rely more on their own resources to continue learning remotely through the Internet, television or radio.

The reduction in adult income makes it harder for the parents to bear the direct costs of education such as tuition, fees, books, supplies, uniforms, and private tutoring. Educational outcomes are consequently harmed because the child is either withdrawn from school or inadequately prepared for it. Children are likely to be experiencing worry, anxiety and fear, and this can include the types of fears that are very similar to those experienced by adults, such as a fear of dying, a fear of their relatives dying, or a fear of what it means to receive medical treatment. If schools have closed as part of necessary measures, then children may no longer have that sense of structure and stimulation that is provided by that environment, and now they have less opportunity

to be with their friends and get that social support that is essential for good mental well-being (Kluge et al., 2020).

Being at home can place some children at increased risk of, or increased exposure to, child protection incidents or make them witness to interpersonal violence if their home is not a safe place. This is something that is very concerning.

Some of the positive impact of lockdown is listed below:

- i. Mother Earth healed herself during lockdown due to less or no pollution.
- ii. Parents got time for family from their busy schedule.
- iii. Children got enough time to practice indoor hobbies.
- iv. It promoted online teaching and learning.
- v. Challenges converted into opportunities.

5. What to Do In Mental Health Crisis?

When a mental health crisis occurs, friends and family often don't know what to do. The behaviours of a person experiencing a crisis can be unpredictable and can change dramatically without warning.

5.1. Management at Gross Level

Governments and communities can ensure that mental health and psychosocial well-being are protected and promoted by:

- Primary health care and community care services should be made available to meet basic health needs of elderly people.
- Identifying and protecting vulnerable people e.g. socially marginalized people, people living in institutions.
- Disseminating timely information about the emergency, relief efforts, legal rights and coping mechanisms to the affected population.
- Providing advice to individuals and carers on the development of personal management strategies.
- Engaging with communities to facilitate self-sufficiency in mental health at all times.

- Using the recovery phase as an opportunity to improve baseline services (WHO, 2013).
- Providing psychological first aid and scalable psychological interventions (WHO, 2016).
- Ensuring resilience for tiered services to continue in emergencies.
- Ensuring clinical mental health care and medicines (WHO, 2015).

5.2. Behavioural Management

- Avoid touching the victim unless you ask permission.
- Offer options instead of trying to take control.
- Gently announce actions before initiating them.
- Give them space, don't make them feel trapped.
- Don't argue or try to reason with victim.
- Express support and concern.
- Ask how you can help them.
- Avoid continuous eye contact.
- Keep stimulation level low.
- Keep your voice calm.
- Avoid overreacting.
- Listen to them.

II. Discussion

Infections caused by these viruses are an enormous global health threat. They are a major cause of death and have adverse socio-economic effects that are continually exacerbated. Therefore, potential treatment initiatives and approaches need to be developed (Kumar et al., 2020). The behaviour of the participants has changed in predictable ways during the Coronavirus Disease (COVID) -19 outbreaks. People were more fearful of their relatives catching the coronavirus disease than they were of themselves catching it (Akdeniz et al., 2020; Varshney et al., 2020).

Physical symptoms and its association with impact on psychological health: It is considered as the most crucial global health calamity because; the impact is associated with greater health anxiety of the people in common. Coronavirus Disease (COVID) -19 poses significant threats to individual and collective

mental health and has rapidly affected our day to day life. This pandemic has affected millions of people, who are either sick or are being killed due to the spread of this disease (Birla S, 2020).

Coronaviruses are a large family of RNA related viruses which cause illness in humans. COVID-19 is an infectious disease caused by the recently discovered coronavirus. Higher psychological impact was predicted with younger age, female gender and old aged people. The most common symptoms of COVID-19 are headache, fever, breathing problems, tiredness, cough & cold. Other symptoms include sore throat, body pain, loss of appetite, loss of taste and smell. According to study, nervousness, fear of infection, restlessness, behaviour seeking constant reassurance, sleep disturbances are the main factors of depression and anxiety in people (Birla et al., 2021b).

Corona Warriors: corona warriors are the people who have shown great vigor, courage, and aggressiveness in fighting with the coronavirus disease. They selflessly chose to put their live at risk. Doctors, nurses, medical staffs, ambulance driver, police force, cleaning staffs and teachers are our frontline corona warriors.

III. Conclusion

The perceived impact of Coronavirus Disease (COVID) -19 pandemic has resulted in the world-wide spread of physical, mental, psychological, economical and social problems. COVID-19 (Coronavirus) poses significant threats to individual and collective mental health and has rapidly affected our day to day life. Various psychological problems and important consequences in terms of physical and mental health including stress, anxiety, depression, frustration, uncertainty during COVID-19 outbreak emerged progressively. In the absence of effective infection prevention efforts (e.g., vaccines) for COVID-19, large-scale public health interventions such as physical distancing or social distancing orders are necessary to reduce pandemic. This work aimed to study the current

literature about the impact of COVID-19 infection on the human health in general population. We aim to inspire the development of research questions on the health implications of COVID-19. This pandemic has caused a lot of uncertainty in the lives of Indian public, just like their global counterparts. There is a need for considering mental health issues by the policy makers; while planning interventions to fight the pandemic.

The spread of COVID-19 has sent shockwaves across the globe. The public health crisis, unprecedented in our lifetimes, has caused severe human suffering and loss of life. The exponential rise in infected patients and the dramatic consequences of serious cases of the disease have overwhelmed hospitals and health professionals and put significant strain on the health sector. As governments grappled with the spread of the disease by closing down entire economic sectors and imposing widespread restrictions on mobility, which is expected to burden societies for years to come.

Social distancing or physical distancing, isolation and quarantine are the public health practices used to protect the public by preventing the exposure of those who have or may have a contagious disease.

Presence of psychosomatic symptoms: Apart from the real physiological damage, the coronavirus wreaks upon the lung and respiratory tract. But we must not forget another adverse effect of Coronavirus Disease (COVID) -19 and that is the appearance of psychosomatic symptoms. A mentally susceptible patient keeps on thinking that such & such symptoms are appearing in their body while it may not actually be so. But their psyche plays such a strong role that these symptoms actually pitch up without any physical or pathological basis. Hence, apart from the medical support, the patient may need psychiatric help also.

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