Review Article

Impact of COVID 19 Pandemic on Psychological Wellbeing and Suicide

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Abstract

The outbreak of Covid-19 came to light in December 2019 with the emergence of unexplained fever and pneumonia. In a matter of few months, the disease had spread to various countries worldwide and was labelled as a pandemic. The causative organism behind tis pandemic is the novel corona virus. Authorities in the entire world have taken drastic steps to control the spread of pandemic and protect the citizens. Strict isolation, quarantine, and lockdowns were imposed in almost every country around the globe. Individuals were confined to their home for days together resulting in disruption of normal routine and intense mental stress. During the pandemic everyday activities were disturbed, and people also suffered huge-economic losses. Due to the reduction in interpersonal contact and social activities, various mental health problems, psychological issues emerged and in some countries many suicides were reported. Health-care workers have undergone a lot of stress, intense long shifts and sleepless nights in taking care of the Covid-19 patients. During such situations of uncertainty importance of mental health awareness is very crucial. Simple steps for behavior changes and inculcating mindfulness into everyday routine can make significant changes towards a positive mental health. Taking steps towards mental hygiene and seeking support from mental health-care workers has played a remarkable role in this regard. However, due to the presence of pandemic routine personal health care became less accessible to the general public. This crisis has paved the path towards development and acceptance of digital psychiatry as a mode of treatment. In this review paper an attempt has been made to provide an overview of the mental health awareness of people during the pandemic, emotional well-being during lockdown, prevention of suicide, and emergence of digital psychiatry during the Covid-19 pandemic.

Keywords: COVID-19, suicide, pandemic, mental health, psychological impact.

Introduction

The first case because of COVID-19 pandemic was reported at the end of 2019 in China and since then it has spread globally leading to death of millions of people around the world. The clinical picture of COVID- 19 varies from asymptomatic picture to severe clinical conditions including acute respiratory distress, sepsis, septic shock and multiple organ failure (Cascella et al., 2020). The authorities including medical professionals and public health specialists have been working round the clock taking care of individuals who are very sick, while putting in measures to control the coronavirus's spread. During tackling the pandemic little less attention has been given to its influence over mental health however,

recent articles have highlighted its impact on mental health. Ornell, et al.,(2020) has mentioned in their article that the COVID-19 pandemic has profound psychological and social effects. The psychological sequelae of the pandemic will probably persist for years to come. Health and mental health practitioners have faced many difficulties in this during Covid-19 pandemic because of very little knowledge of its psychological effects and underlying mental health problems on general public. There is an emerging uncertainty due to the widespread outbreak of such unparalleled magnitude affecting individuals across the globe. Researchers are busyexploring the genomic characterization of the virus, identifying the epidemiology and clinical characteristics of infected patients and the challenges faced by healthcare authorities and functionaries. In India, the focus on mental health impact of Covid-19 has been limited however recently studies have been coming up.

Psychological wellbeing and COVID-19 Pandemic:

To combat COVID-19, public health interventions such as self-isolation, social distancing, and quarantine were introduced worldwide (Bodrud-Doza et al., 2020). Arguably, the whole planet was under lockdown, which disrupted the usual lifestyle. Studies have found that lockdown, isolation and quarantineelevatepsychologicalsymptomssuchasde pression,anxiety,phobia,trauma,etc. (Brooksetal., 2020). In addition, due to lockdown occurring everywhere, there was economic fallout and job losses, which disposed individuals towards psychological disorders such as depression, anxiety, stress, etc. (Mamun & Ullah, 2020).With respect to India, a country with limited mental health providers and knowing that skilled mental health treatment does not reach every citizen, the psychological distress caused by COVID-19 may go unnoticed. Consequently, psychological state alongwith employment and economic status, and lifestyle of individuals are substantially a? ected in the Indian population. 90% of suicide causalities are likely to have been accounted for by these psychiatric disorders (Mamun & Griffiths, 2020b, Mamun & Griffiths, 2020c).

To analyze the effect of the COVID-19 crisis on the mental health of the general public, health care workers and people with psychiatric conditions, a variety of studies have been carried out. A study has been conducted having psychological responses during the initial stage of theCOVID-19 epidemic in the general population in China. It was found that 53.8% of 1210 respondents graded the outbreak's psychological effect as mild to extreme, 16.5% reported moderate to severe depressive symptoms, and 28.8% reported moderate to severe symptoms of anxiety (Wang et al., 2020). During the COVID-19 outbreak, Qiu et al.,2020 conducted a nationwide survey that included 52,730 individuals in China and found that around 35 percent of participants had psychological distress. This is consistent with the findings of a recent survey by the Kaiser Family Foundation showing that 45 percent of adults in the USA claim that their mental health has been adversely affected due to coronavirus concern and stress (Panchal, et al., 2020). Another study has been conducted on relationship between social capital as measured by the Personal Social Capital Scale 16 and sleep characteristics in person who were isolated during the COVID-19 epidemic. Researchers found that stress and decreased sleep quality were correlated with anxiety and the combination of anxiety and stress reduced the beneficial impact of social capital on the quality of sleep. It has also found that anxiety and stress of isolated individuals were at high levels, whereas the sleep quality was low. (Xiao, etal., 2020).An online study of 1074 Chinese individuals was conducted by Ahmed et al. and found high rates of anxiety, depression, unhealthy use of alcohol and reduced mental well-being. Rates of anxiety and depression were higher among young people aged 21–40 years in comparison to other age groups (Ahmedetal. 2000). Huang and Zhao conducted a web-based survey of 7236 individuals in

China. 35.1 percent, 20.1 percent and 18.2 percent were the cumulative prevalence of generalized anxiety disorder, depressive symptoms and sleep abnormalities respectively. This study also showed that health care professionals were more likely to have poor sleep quality in comparison to other occupational groups (Huang & Zhao,2020). A study revealed that Covid-19 is creating psychological distress among the individuals, as there are restrictions due to lockdown people are forced to stay home. Owing to the lockdown and constraints put on them, people are going through a crisis situation and experiencing a lack of control over their lives. In terms of career and working life, young people and adult age groups face uncertainty; jobs are at risk. Among them, fear of infection causes a panic situation. Particularly in young groups i.e. 15-35 years, there is an increase in levels of anxiety, stress and depression, but previous studies have shown that anxiety, stress and depression are more prevalent in the older age group, i.e. 40-49 years. (Kazmi, et al.,2020). A research by Gao et al., (2020) conducted in China to quantify the prevalence of mental health issues and investigate their relationship with exposure to social media found a strong correlation between the two.

In the midst of the COVID-19 crisis, there was a rise seen in incidences of domestic violence and child abuse. There have been a number of stressors during this lockdown that have caused distress among the population, such as quarantine, pay cuts, unemployment, insecurity, fear, crime, rape, etc. Although quarantine is a required preventive measure to curb the spread of infectious diseases, several studies have shown that quarantine has a negative psychological effect on people (Brooks, et al., 2020).

Due to the prolonged lockdown situation that has resulted in an ongoing economic crisis that has subsumed households. India's unemployment rate may have climbed to more than 20 percent, according to a survey by the Center for Monitoring the Indian Economy (Nag, 2020), as the economy lost due to job losses after a national lockdown took effect in the last week of March 2020.The WHO (2020a) stated that as a new disease, COVID-19 is bound to cause people to be puzzled, nervous and scared. Such variables may give rise to damaging assumptions. Owing to related stigma, individuals may be forced to conceal their illness due to fear of prejudice, prohibit individuals from immediately pursuing health care, and may deter them from practicing healthier behaviors. Stigma has been observed against people, families and even health care workers who are infected. There have been instances of attacks on health staff because of the stigma (Altstedter et al., 2020). The coronavirus disease effects identified by Gunnel et al. (2020) may be profound and there are reports that suicide rates would increase. Sahoo et al., (2020) investigated two suicide attempt cases brought to the hospital in conjunction with fear of contracting the COVID-19 infection. The authors opined that both the attempts could have been prevented if the patients had access to right information. In both the cases, the depression and anxiety were fuelled by the information overload in the media, with respect to COVID-19. It has examined a state of mental health of 1257 healthcare professionals in China. 50.4% of study participants reported depression, 44.6% anxiety, 34.0% in somnia and 71.5% distress. Front line healthcare professionals who were taking care of patients with COVID had a higher risk of having symptoms of depression, anxiety, in somnia and distress in comparison to other medical professionals (Lai, et al., 2020).Ahmed et al. conducted an online study in March 2020 to investigate anxiety and fear of being infected among dentists. Replies were obtained from the writers of 669 dentists from 30 nations. Anxiety and fear of contagion were identified by an overwhelming majority of study participants. For an unspecified period of time (Ahmed et al., 2020), some dentists closed their practices. The psychological effect of the COVID-19 outbreak on individuals with or without mood and anxiety disorders has also been studied (Hao et al., 2020).Worries about their physical health, anger,

impulsivity and suicidal ideation were significantly higher in psychiatric patients than in healthy controls (Haoetal., 2020). Probably, alcohol consumption increases during the COVID-19 crisis (Ornell et al., 2020). Online alcohol sales jumped 243%. In mass media and psychiatric literature, numerous cases of COVID-19-related suicides have been recorded in the USA, UK, Italy, Germany, Bangladesh, India and other countries. For instance, after a suicide attempt, a 19-year-old waitress in England died in a hospital due to fears of the 'mental health effects' of isolation (Miller,2020). After testing positive for the coronavirus, a 66-year-old man with throat cancer hanged himself in a New York City hospital (Moore & Bensimon,2000). AmaninIllino is who feared that he and his girl friend contracted the coronavirus fatally shot his girl friend and then killed himself. (Garger,2020).They tested negative for the coronavirus. A 36-year-old Bangladeshi man killed himself because, because he had fever and cold symptoms, he and people in his village believed he was sick with COVID-19 (Mamun & Griuiths,2020). A postmortem examination found he had no COVID-19. After telling her family about the immense pain and death she witnessed while taking care of coronavirus patients, the 49-year-old director of the Emergency Department at a New York City hospital died of suicide (Rosner et al., 2020). There is also a significant rise in calls during the new COVID-19 crisis to suicide prevention hotlines in the USA (Dunmore, 2020). So, it can be seen that in the general population, the COVID-19 pandemic is associated with pain, anxiety, fear of contagion, depression and insomnia. Professionals in health care are particularly distressed (Leo Sher, 2020)

Suicidal behavior and COVID-19 pandemic: Social isolation, anxiety, fear of infection, fear due to uncertainty, chronic stress and economic burden can contribute to the development or exacerbation of stress-related disorders and suicide in vulnerable populations, including ones with pre-existing psychiatric disorders, people with low resilience, people living in high prevalence areas of COVID-19 and people who have lost a family member or a friend who had COVID-19 (Sher, 2019).Social Isolation/distancinginduce a lot of anxiety in many citizens of different country.

However, people with existing mental health conditions such as depression and older adults living in loneliness and isolation are the most vulnerable. These individuals have serious suicidal thoughts and are self-judgmental. For an unspecified period of time, forced isolation and quarantine disrupts normal social lives and induces psychological fear and feeling as if trapped. On 12 Feb 2020, South India announced the first suicidal case, where Balakrishna, a 50-year-old man, wrongly associated his usual viral infection with COVID-19 (Goyal, et al., 2020). Panic may be triggered by the looming economic crisis, mass unemployment, poverty and homelessness may increase the risk of suicide or drive an increase in the attempted suicide rates in such patients. US already claimed a vast increase in unemployment (4.6 million) during coronavirus emergency and speculated that lockdown will cause more deaths than COVID-19 itself amid the recession (Reger, et al., 2020).

Individuals with pre-existing psychiatric disorders include not only patients who are treated by mental health professionals but also a very large number of people with psychiatric conditions who do not receive psychiatric treatment. Community epidemiological research in the USA shows that a majority of individuals with mood disorders are either untreated or under treated (Kessler et al., 2007). For example, an international research that included the data from countries in Europe, North and South America, Asia and Australia found that the median untreated rates for schizophrenia, major depression and alcohol use disorder were 32.2%, 56.3% and 78.1% respectively (Kohn et al., 2004) Social isolation contributes to the patho physiology of psychiatric disorders and suicidal behavior. Durkheim E., 2012 in his famous book on suicide emphasized that social connected nessisacritical

factor in emotional health and social stability. As well as other research studies, the Irish Longitudinal Report on Aging indicates that social isolation and loneliness are correlated with severe depression and generalized anxiety disorder (Domènech-Abella et al., 2020). Studies have shown that both objective social isolation (e.g. living alone and subjective sense of being alone are correlated with suicidal ideation and actions (Calati, et al., 2019). These observations are consistent across diverse cultures and populations. For example, the Quebec Health Survey showed that living alone and having no friends were associated with both suicidal ideation and suicide attempts (Stravynski, 2001). During Hong Kong's 2003 SARS crisis, social disengagement played a role in the increased suicide rate. During the SARS epidemic, one third of SARS-related suicide victims encountered social isolation. (Yip et al., 2010). From a suicide prevention perspective, it is troubling that the most important public health approach for the COVID-19 epidemicis social distancing. In conventional and social media, fear due to uncertainty and panic-inducing stories and fear of contamination during the COVID-19 crisis can lead to confusion and panic. Repeated exposure to the COVID crisis reports will exacerbate anxiety. Worries and fears cause different mental and physical symptoms and can lead to the development of anxiety disorders, sleep disorders and depression (SherL.2019.) Sleeplessness contributes to symptoms of depression and anxiety and contrariwise, symptoms of depression and anxiety disturb sleep. A stand-alone risk factor for suicidal conduct is sleep disturbances (Bernert & Nadoru,2015).

A recent study in China indicated that 96.2% of recovering COVID-19 patients had significant posttraumatic stress symptoms. (Bo et al., 2020.). COVID- 19 infection is associated with neurological conditions including acute ischemic stroke, headache, dizziness, ataxia and seizures. A recent review of the impact of the COVID on the brain show that neurological conditions are present in about 25% of the COVID-19 patients (Asadi et al., 2020). Suicidal behavior is associated with neurological conditions such as ischemic stroke, headaches and seizures. Physical symptoms, especially pain increase the risk of suicide (Ahmedani et al., 2017). Suicide is associated with psychological problems, including mood, anxiety, sleep and substance use disorders. Studies in the USA suggest that >90% of suicide victims have a psychiatric disorder. For example, depression is a major risk factor for suicide, accounting for up to 60% of suicide deaths (Sher, 2019 & Mann et al., 2005). The mental health implications, including suicidal tendencies, of the COVID-19 crisis are likely to be present for a long time and peak later than the actual pandemic. The causes of suicide are included as follows: fear of COVID-19 infection, followed by financial crisis, isolation, social boycott and quarantine strain, positive COVID-19, work-related stress, unable to return to home due to lockdown, alcohol unavailability, etc.

Given the severe psychological effects associated with COVID-19, there is a need for robust tele-mental health care programs nationally (Deena et al., 2020).Suicide prevention During COVID-19 pandemic: In 1994, the Institute of Medicine (now the National Academy of Medicine) Committee on Prevention of Mental Disorders suggested that prevention of psychiatric conditions should be divided into three categories: universal preventive interventions, selective preventive interventions and indicated preventive interventions (Muñoz et al., 1996). A universal method, regardless of the suicidality, is intended for everyone in the general population (Sher, 2004.) To reduce suicides during the COVID-19 crisis it is imperative to decrease stress, anxiety, fears and loneliness in the general population. Traditional and social media campaigns to encourage mental health and minimize anxiety should be in place. People need to be motivated to remain engaged by telephone or video to maintain relationships, get enough sleep, eat healthy food and exercise. Providing community support for those living alone and encouraging family and friends to check in is important. Screenings for anxiety,

depression and thoughts of suicide should be included. Transparent, timely and responsible media reporting is absolutely necessary. Including clergy, first responders, pharmacists, geriatric caregivers and school workers, community or organizational gatekeepers may have the ability to recognize people at risk of suicide and guide them to appropriate assessment and treatment. Helplines for suicide prevention should be available and can be very effective in preventing suicides. Integration into outpatient primary care of basic mental health services can help to reduce the negative psychological effects of the crisis of COVID-19. Governments and NGOs can, wherever possible, provide financial assistance to people in need. This may include direct cash payments, postponement of loan repayments, tax credits etc. A selective approach is for subgroups at increased risk for suicide, for example, for individuals with a history of psychiatric disorders, persons with symptoms of significant emotional distress, COVID-19 survivors, frontline health care professionals and elderly people. (Sher, 2004).

Particularly for people with a history of mental problems, COVID-19 survivors and older adults, active outreach is important. People with psychiatric disorders should be advised to continue their treatment regimens and to stay in touch with their mental health professionals. In their care, certain psychiatric patients may require improvements and an increased level of interaction with their mental health providers. Telemedicine can improve accessibility of mental healthcare. Vulnerable individuals should also be advised to restrict viewing, reading or listening to traditional and social media news stories. An indicated approach is intended for individuals who have a risk factor or condition, such as a recent suicide attempt, that puts them at very high risk of suicide (Sher, 2004). Individuals in suicidal crises need special attention. Due to concern that attending face-to-face appointments with a health care provider will put them at risk of contracting COVID-19 or for other reasons such as Stigma, some suicidal people might not seek help. Therefore, people with a recent history of suicide attempts need follow-up. Clinicians should have well-defined guidelines on how to deal with suicidal individuals. Suicide prevention in the COVID-19 era is an important issue. During and after the COVID-19 pandemic, research studies are required on how mental health effects can be mitigated. It is hoped that COVID-19 associated suicides would be minimized by the efforts of mental health care providers, researchers and policy makers. Socio-psychology needs and interventions for mental rehabilitation should be designed. It is important to incorporate tele-counseling along with a 24x7 crisis response program for social, mental and behavioral support. However these steps are already being followed and adopted by most countries. Health care policies and the perception for the COVI-19 health care professionals need to be strengthening as reported from Chinese studies (Li, et al., 2020; Kang, et al., 2020).

Considering the COVID-19 related extreme psychological impact on individuals, there emerges a need for extensive mental health services. This can be addressed through services such as tele-mental health care, where mental health providers are expected to play an important role in fostering psychological and emotional well-being, improving problem-solving and health-promoting behaviors in service users (Mamun & Griffiths, 2020).In addition, it is important to provide adequate and authentic information on COVID-19 and mental health care opportunities to improve the public's awareness of COVID-19. In addition, social media including news media such as TVs, news portals, etc. should take steps to encourage healthy mental health in the battle against more suicides due to COVID-19 (Mamun & Griffiths, 2019).

COVID-19 has created a state of challenges and crisis for many. So far a large part of the psychological responses have been reactionary to what has occurred in other nations around the world. There is

a looming worry of what could be in store in the times ahead. By knowing the trend, planning can be done to effectively manage COVID-19 pandemic in terms of infrastructure, manpower and mental health resources. The review article will help the health , especially the mental health professionals to understand the variable trend ofpandemic and planning for management by looking towards the psychological issues faced due to lockdown or quarantine and also the after effects of COVID-19, so that it could be prevented from becoming the 'Next Wave' of the pandemic.

Conclusion

The current global pandemic situation demands a multidimensional approach to the demands of healthcare. There needs to be a holistic model of delivery that takes care of the physical, emotional, social and spiritual wellbeing of patients and communities into account. To ensure effective and adequate treatment for the many thousands who are mentally impacted after the pandemic, it is important to ensure that mental wellbeing is incorporated into the large COVID-19 health care response system.In order to integrate these facets of health care delivery, public health systems need to be improved by making their staff more sensitive and equipped to cope with the pandemic burden. Governments can organize and provide the most vulnerable groups and communities with uninterrupted access to critical services.

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