



**ORIGINAL RESEARCH PAPER**

**Psychiatry**

**SUICIDE RELATED RISK FACTORS DURING THE COVID-19 PANDEMIC**

**KEY WORDS:** Covid-19, suicide, lockdown, pandemic

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**ABSTRACT**

In India, media and press report frequent suicidal death in the context of coronavirus disease 2019 (COVID-19) pandemic. Apart from known sociodemographic, psychological and mental health disorder related risk factors of suicide, a unique, different set of reasons seem to be noted among suicides during this pandemic. Notably, fear of being infected and infecting dear ones, lack of understanding about the disease, fear of isolation, distress from lockdown, boredom from excess time with self, uncertainty of cure, despair of being locked at home and socially isolated, all together compound emergence of preexisting new onset depression, panic, post-traumatic stress, psychoses and substance use. Complicated economic, social, and political instability due lockdown has worsened vulnerability to suicidal behaviours among general population and healthcare workers. Although the long-term evolution of the course of suicide and covid-19 disease is unpredictable, the first few months have identified few unique risk factors and research must work on specific tailored strategies that address these novel risk factors are needed to mitigate suicide now.

**INTRODUCTION**

COVID-19, the name given to the novel coronavirus disease, has been speculated to have originated from such virus experimental laboratory in China around late 2019 and is continuing as a pandemic across the globe. The novel coronavirus disease 2019 (COVID-19) pandemic has killed millions and continues to have an overbearing influence on our psychosocial wellbeing across the globe.<sup>1</sup> As evidence grows about its pathogenesis, covid-19 damages the lungs causing respiratory failure, in addition to a myriad of other clinical manifestations ranging from asymptomatic forms to severe clinical conditions characterized by sepsis, septic shock and multiple organ dysfunction syndromes.<sup>1</sup>

**Mental health and COVID-19**

Equally significant has been the overwhelming mental health impact of covid-19 on everyone irrespective of age, sex and socioeconomic status. <sup>1, 2</sup> Evidence exists to prove that mental health problems and suicide rates were high during the Spanish flu and Severe Acute Respiratory Syndrome (SARS) pandemics. <sup>3, 4</sup> Studies have identified that both general population and even healthcare professionals have reported feelings of anxiety, depression, worsening of substance abuse and hopelessness. <sup>5-10</sup> Importantly suicides have been frequently reported in the media. Despite all these reports, little has been possible in terms of addressing these mental health concerns related to covid-19 and our Indian scenario with its disintegrated and poorly equipped mental health infrastructure grapples with helplessness in providing appropriate mental health support.

The progression of evolution of mental health impact from covid-19 has been raising alarms since the beginning. While ethical and practical limitations prevent any robust research methodology to study the psychological impact and influence of variables related to covid-19, few studies were still carried out. During the early stages of covid-19, studies from China and the USA identified presence of psychological distress, mixed depressive and anxiety symptoms among half of the general population sample. <sup>5, 6, 7, 9</sup> People aged 21 to 40 years and healthcare related professionals showed higher symptom score in general. <sup>11</sup> Although fraught with reporting bias, research studying people perceived that their lives will be of poor quality post covid-19. <sup>8</sup> The impact of lockdown and social isolation was studied and found to show higher levels of stress, anxiety and poor quality of sleep. <sup>9</sup> A unique variable related to covid-19, fear of contagion was being identified among general population and all professionals whose occupation involved close contact with consumers. <sup>12, 13</sup>

Understandably, people with pre-existing psychiatric morbidity and substance use showed worsening of symptoms in addition to higher vulnerability to suicidal behaviour. <sup>14, 15</sup> Suicide and COVID-19: Suicidal behaviour ranging from attempts to death was noted frequently in the developed countries <sup>16-21</sup> and the reasons usually reported on social media and press were psychological fears of contagion, lockdown, social isolation from covid-19. This fear pushed people to suicidal death by hanging, suicide followed by manslaughter. <sup>17, 18</sup> Ironically, few people killed themselves by suicide despite not being infected with covid-19 or having a negative test for the same. <sup>19</sup> The only support that people in distress could seek were the national suicide helplines.<sup>21</sup>

Indian scenario: Although covid-19 gripped India at least 2 to 3 months later than the developed countries, a total of 23 suicidal deaths have been reported on media since then. Surprisingly the risk variables that were identified by the police who investigated most of these deaths were very similar to those reported from the other parts of the world. Fear of contagion, stress from lockdown, social isolation, and fear of spreading disease to family was noted in these suicidal death cases. Vulnerability of economic, occupational and health related factors played a significant role in these deaths. Unpleasantly, making alcohol re-available to consumers augmented the worsening of mental health and psychiatric disorders among many. An unusual phenomenon of migrant workers, who were stuck away from their homes in highly unhealthy living conditions with little to feed themselves, was an added burden to the covid-19 morbidity in India. Both general population and medical professionals were affected. Suicidal Prevention strategies and COVID-19

'Suicide is an ubiquitous phenomenon' has been a frequent opening statement in many suicide related research articles and such relevance is strongly observed during this coronavirus pandemic across the globe. But how and why to justify or worry if a person commits suicide when suicidal ideas or thinking tends to occur in everyone's mind during this stressful time period. From an epidemiological perspective, suicide prevention strategies include a) Primordial prevention: address risk factors to suicide (population or high-risk groups), b) Primary prevention: Create awareness and provide education about suicide, c) Secondary prevention: Provide treatment and support for those who attempt suicide and survive, and d) Tertiary prevention: Rehabilitation for suicide attempt related damage and for families. Current thinking states suicide as being multifactorial, and an interplay between biopsychosocial

vulnerabilities. Despite all these strategies, still suicide happens. Although current strategies explain suicide phenomenon at a population level, they probably lack some very important, relevant aspects that are essential to decipher the cognitions, emotions, perceptions and whatever else that immediately precedes the act of committing suicide, especially in the context of covid-19.

It can be possibly explained that challenges caused by covid-19 forced on all of us due to lockdown, social isolation, acute and chronic stress and socioeconomic difficulties warrant innovative and beneficial methods of adaptation and coping strategies that will address these risk factors specific to covid-19. While universal approaches targeted at population and high-risk groups do not seem to particularly address covid-19 related risk factors for suicide, highly selective approaches might need to be designed quickly if mental health morbidity and suicidal deaths must be controlled. Firstly, it can be speculated that the ill-effects on the psychological wellbeing due to covid-19 pandemic might endure for years. Irrespective of any status, all of us are vulnerable to stress that emanates from sudden change of life routine into a claustrophobic mode of existence where we are forced to test our abilities on aspects of our own lives that we always did off with. Similar impact can be understood as a consequence of social isolation. Variability in levels of hope of recovery to usual life routine with high uncertainty that a new routine is a possible norm seems to be an insurmountable task. Excess time and thought spent over such polar thought process tends to cause mental exhaustion after a while. It is left to speculation how such mental fatigue could contribute to suicidal behaviour in different people. Obviously graded and complete removal of lockdown might be expected to reverse its effects, but its impact will leave short or long term mental health changes.

Secondly, the fears related to being infected and spreading it to family and friends arises largely from the lack of sufficient scientific knowledge about treatment options for covid-19. Notoriously, misinformation about this disease has already caused suicidal deaths and confusion among all. While a patient wait for an effective vaccine as a cure is the most sensible thing to hope for, all efforts must be made by each one of us to gather credible information, seek clarifications, avoid misinformation, and strictly adhere to primary prevention methods of safety which is an evidence based proven method to remain infection free. Traditional and social media campaigns that promote mental health and reduce distress can be very useful. Individual efforts should focus on maintaining connectedness through whatever means possible with family and friends. Participation and active obedience with government based preventive and remedial strategies must also be an individual responsibility. Regular self-review of mental health wellbeing for changes such as disturbance of emotions, sleep, appetite, self-esteem and motivation must also become part of the schedule against the covid-19 related lockdown and social isolation. People must refrain from moving into the community for accessing mental health related support and instead seek technology based systems such as telemedicine and telephone help lines for expert opinion in dealing with suicide related behaviour. For those who are actively contemplating suicide, calling emergency helplines must still remain an option and the risk of contagion versus preventing suicide needs to be a shared decision making with expert health professionals.

In conclusion, As WHO stated 'Suicide prevention is everyone's responsibility', each one of us, all health care workers and mental health professionals must motivate each other with unconditional hope on our abilities to fight the negative emotions and suicide related behaviours. It remains highly imperative that all of us from individuals, health experts and researchers must work together to focus mind

and energy on these unique factors namely covid-19 related lockdown, social isolation, fears around contagion, fears from misinformation and mental health wellbeing on a daily basis with special focus on the need to effectively address and deal away with suicidal thinking and behaviour. Conflict of interest. None declared.

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