### **Original Research Paper**



### **Medicine**

#### IS COVID-19 "SUICIDE STORM", A BEGINNING OF A LASTING PEACE?

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ABSTRACT Suicide is defined as the act of annihilate personality. The load of suicidal tendency increases during the COVID-19 pandemic The COVID-19 pandemic has shown its consequences on mental health. Self-harm and suicide are its intense effects. The effects of COVID-19 on suicidal actions have not been fully analysed but few cases are approaching "suicide storm" Coronavirus disease 2019 (COVID-19) outbreak has serious psychological and social effects. The psychological residue of the outbreak continue for the coming years COVID-19 pandemic is linked with distress, anxiety, fear, depression and insomnia in the general population. The Coronavirus disease 2019 (COVID-19) has increased the risk of isolation, fear, stigma, and economic fallout, COVID-19 has increased the risk of lunatic anarchy, trauma and stress, which eventually increase suicidal behavior. The frontline workers, elderly, migrants, homeless, poverty, and those with pre-existing mental disorders, are at higher risk. The coronavirus disease (COVID-19), has affected the whole world and resulted in many people's death, and ill effects on mental health.

KEYWORDS: "suicide storm", lunatic anarchy,trauma, self-harm (SH), Schizophrenia, Bipolar disorder, Depression, Anxiety

#### INTRODUCTION

The consequences of pandemic and lockdown on socioeconomic, mental health, and other aspects of Nepalese society are immense (1) Suicide and self-harm (SH) are a serious public health problem; however, it is preventable with timely, evidence-based, and often low-cost interventions. Every year approximately 800 000 people commit suicide and many more attempt it. In 2016, it was listed as the second leading cause of death among 15-29-year-olds worldwide (2)

Nepal was ranked 7th by suicide rate globally in 2014. The World Health Organization (WHO) reports an estimated 6,840 suicides annually or 24.9 suicides per 100,000 people in our country (3)

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 (4,5)

Social isolation contributes to the pathophysiology of psychiatric disorders and suicidal behavior (6)

The increased incidence of psychosocial problems, exacerbation of pre-existing psychiatric disorders and fear of infection, uncertainty, isolation, unemployment, stress and mass panic have all contributed to one of the most concerning cause of mortality: suicides (7)

Suicide prevention responses need to be comprehensive and they need to be backed up by increased surveillance of COVID-19 specific risk factors (8)

They often welcome death, suffering from hunger and unable to survive far from homes, when living conditions are a greater threat than the virus it selff (9) A meta-analysis showed that the mental health

impact of the COVID-19 pandemic on healthcare workers was more severe compared to the general population (10)

In view of depression being a significant factor associated with suicidal ideation, early identification of depression as a target for intervention is a potential suicide preventive strategy (11)

These environmental factors remained significant after accounting for pre-existing mood and anxiety disorders as well as level of exposure to COVID-19(12) Of note, the COVID-19 pandemic is considered the most severe pandemic of the 21st century with significant repercussions not only on physical health, but on mental health as well (13)

Multiple public health interventions have also been implemented worldwide to decrease the transmission of SARS-CoV-2(14) Moreover, an increasing number of studies have suggested that patients with COVID-19 may experience neuropsychiatric manifestations, both during the acute and post-illnessstages (i.e., COVID-19 survivors)(15)

The severity of acute SARS-CoV-2 infection appears to be related to subsequent psychiatric or neurological sequelae, while there may be a tendency towards symptom improvement over time (16) Suicide is the act of intentionally causing one's own death (17)

#### History

In ancient Athens, a person who died by suicide without the approval of the state was denied the honors of a normal burial. The person would be buried alone, on the outskirts of the city, without a headstone or marker (18) However, it was deemed to be an acceptable method to deal with military defeat (19)

In Ancient Rome, while suicide was initially permitted, it was later

deemed a crime against the state due to its economic costs. Aristotle condemned all forms of suicide while Plato was ambivalent (20)

In Rome, some reasons for suicide included volunteering death in a gladiator combat, guilt over murdering someone, to save the life of another, as a result of mourning, from shame from being raped, and as an escape from intolerable situations like physical suffering, military defeat, or criminal pursuit (21)

#### Methods of suicide

A person prefers to die by several suicidal methods. Sometimes these attempts results the person with several injuries, health problems, and brain damage (22)

Hanging, poisoning by pesticides and firearms are the most common methods of suicides (23)

Other methods are drug overdoses, jumping from a great height, and drowning.(24,25)

Other important measures are the introduction of policies that address the misuse of alcohol and the treatment of mental disorders and other gun-related deaths (26,27)

#### Who is at risk

Criminal problems, Financial problems, Mental illness, such as depression, Previous suicide attempt. Social isolation, Job problems, Impulsive or aggressive nature, Legal problems child abuse and neglect, Relationship problems, Sexual violence, and Family history of suicide. Lesbian, gay, and bisexual highschool students are more likely report to go for suicide attempts. Stroke survivors are more likely to attempt suicdes than people without stroke.

#### Suicidal thoughts

The common warning signs of suicide depression is a major risk factor.sad,melancholic,moody behaviour,sudden calmness, behavior changes,increased use of drugs,alcohol, much more or much less sleep. Death of a loved one, divorce or break-up of a relationship, major illness, loss of a job and serious financial problems are the warning signs of suicides.

## Representative cases showing psychological conditions leading to COVID-19 suicides.

# More than 75% of those who died in current COVID-19 wave in Delhi were unvaccinated: Minister Satyendra Jain

Delhi is expected to record less than 25,000 coronavirus cases on Friday, Health Minister Satyendra Jain said, while stating that almost 75 per cent of those who have succumbed to the infection were unvaccinated. "Delhi is expected to record less than 25,000 cases today," Jain told reporters (28)

## 41 pregnant women die of COVID-19 in Kerala, 149 patients end life: Govt

The findings of the state study indicated that a larger section of the population in the state have attained the resistance power against the pandemic. It also pointed out that 17 per cent of the total population was still prone to the disease, state Health Minister Veena George said.

# ${\bf COVID-19:SC} \ \ asks \ \ Centre \ \ to \ \ reconsider \ \ decision \ \ to \ \ exclude \\ compensation for those who died by suicide$

The top court was considering the fresh guidelines issued by the Centre to simplify the process of issuance of death certificates, as per the directions in the judgment delivered on June 30. The apex court asked the Solicitor General about the persons who committed suicide while they were suffering from Corona.

### Suicides due to unemployment highest in COVID-hit 2020: Centre

Over 16,000 people committed suicide due to bankruptcy or indebtedness while 9,140 people ended their lives due to unemployment between 2018 and 2020, the Ministry of Home Affairs informed the Rajya Sabha. As many as 9,140 people ended their lives due to unemployment, the highest number of such cases - 3,548 were reported in 2020, the year a lockdown was imposed in the country due to COVID-19 and large scale job losses and economic slowdown were reported in many sectors (29).

#### COVID crisis drives three to suicide

Unable to cope with financial problems triggered by the COVID-19

crisis, a 30-year-old tribal woman allegedly committed suicide by jumping into the Munneru river along with her two children here on Wednesday. The deceased were identified as D Vanitha, 30, Chaitanya, 9 and Rohitha, 7, residents of Revathi Centre locality in the town. Sources said that Vanitha, wife of D.Ravi, an auto rickshaw driver, took the extreme step along with her two children due to mounting debts in the midst of the pandemic. She had been staying at her parents' house with her son and daughter at UPH Colony since her husband contracted COVID-19 last month, sources added (30)

#### COVID-19 patient attempts suicide

A COVID-19 patient admitted at Jawaharlal Institute of Postgraduate Medical Education and Research on Tuesday attempted to kill himself. Jipmer, in a release, said the moment healthcare workers noticed the incident, the patient was rescued.

# $\label{lem:come} Adverse\ impact\ of\ Coronavirus\ |\ Unable\ to\ come\ out\ of\ financial\ crisis,\ couple\ end\ lives$

A couple ended their lives unable to come out of the financial crisis caused by prolonged lockdown due to **COVID-19** pandemic. A barber by profession Kishore (40) and his wife Kavitha (38), hailing from Pothanpally in Chegunta Mandal and residing presently in Chilakalaguda of Hyderabad decided to commit suicide having lost livelihood and unable to come of the debt trap. As the hair salon, he ran was closed for a long time due to **COVID**, Kishore was burdened with the task of paying rent for the shop, give salaries to the other workers, in addition, to run the house and give rent for the house.

#### **COVID** patient commits suicide

In a shocking incident, a 60-year-old woman patient of the COVID-19 ward in the District Headquarters Hospital here allegedly committed suicide on the hospital premises on Thursday night. The police identified the deceased as Mariyamma of Buddharam village in Nelakondapalli mandal. Sources said that she ended her life by hanging with her sari inside a toilet on the premises of the hospital around 8 pm on Thursday. The incident sent shock waves among patients and staff of the COVID-19 ward in the hospital. When contacted, two-town circle inspector of police T Gopi told *The Hindu* that depression might have prompted the poor woman to resort to the extreme step. Further investigation is underway, he said.

Santosh Kaur, a 65- year-old woman, committed suicide over the fear of the COVID-19. Person was depressed, had anxiety over COVID-19 and was alone. Her fear was just an illusion and there was no one to counsel or to console her (31)

19-year-old Emily Owen, youngest suicide victim (**Britain**), Fear of isolation was created just by the announcement of the country lockdown (32)

#### COVID-19 horror

COVID-19 has affected many lives throughout the world and has impacted lives negatively not only on physical health but also mental health. The initial days of pandemic brought uncertainty in the lives of people and has caused fear and panic. The quality of life of people has decreased especially in those already suffering from mental illnesses like Schizophrenia, Bipolar disorder, Depression, Anxiety, Substance use disorders etc. The Cognitive distortions arising out of negative beliefs has raised which are responsible for causing Anxiety disorders and Depression.

A study done by Dsouza et al in 2020 in India attributed the COVID-19 fear as a prominent cause of suicides in the pandemic (33)

#### Long working hours and burnout in health care workers

Burnout among health care workers is highly prevalent and has profound impact on quality of care. Hospital on-duty schedules lead to long working hours and short sleeping hours; both are common factors associated with burnout. People did not have much information or idea on how to take precautions in the initial phases of pandemic. Lockdowns worldwide have created panic to all groups of people. Healthcare professionals have been working relentlessly and gave their selfless service to their patients. Continuous and long working hours for the frontline workers has caused burnout and also various other mental illnesses like Anxiety disorders, Depressive disorders etc. among the frontline workers. Studies conducted in various countries have reported higher levels of stress, depression, anxiety, sleep disorders and substance use disorders associated with the pandemic.

Nurses at the frontline of caring for COVID-19 patients might experience mental health challenges and supportive coping strategies are needed to reduce their stress and burnout (34,35)

#### Suicidal thoughts

A study showed that the rates of suicide were higher in females compared to males. Suicidal thoughts arising secondary to depression have risen in patients who has no previous history of depression or anxiety. Patients admitted in the COVID wards had fear and anxiety leading to suicidal ideas which decreased on doing Cognitive Behavioral Therapy and anti-depressants. COVID patients who were isolated from their family members had different types of cognitive distortions like Magnification, Dichotomous thinking and Fortune Telling which further lead to Anxiety, Phobias, Obsessive Compulsive Disorder and Depression. Mental health issues in Post-Covid phase also have risen in many who have recovered from COVID.(36,37)

#### Sleep disturbances

A study in China about COVID-19 revealed that about one third of their sample population has reported moderate to severe anxiety and 53% of the respondents rated psychological impact caused by the COVID-19 outbreak to be moderate to severe (38)

Li et al in their studies on the social media posts of people in china observed that negative emotions including anxiety, depression and anger rose, whereas the positive emotions and life satisfaction diminished.

Patients affected by COVID also reported Sleep disturbances especially those admitted in COVID wards. Decreased quality of sleep has been related to decreased quality of life as sleep disturbances are part of schizophrenia, bipolar disorder, depression and anxiety. Many patients who were dependent on substances like alcohol, cannabis, opioids in withdrawal phase had high suicidal thoughts and ideation. Initial phases of the pandemic observed huge rise in patients with delirium where self-injurious behavior and suicidality was observed.

#### Worsening of Preexisting Psychiatric Conditions during the COVID-19 Pandemic

Pandemics are known to affect mental health of the general population and various at-risk groups like healthcare workers, students and people with chronic medical diseases. However, not much is known of the mental health of people with pre-existing mental illness during a pandemic. More than half of the patients are experiencing worsening of their psychiatric conditions during the COVID-19 pandemic. People with pre-existing mental illness have significantly higher psychiatric symptoms, anxiety symptoms Multiple cases of COVID-19-related suicides have been reported in mass media and psychiatric literature in both developing and developed countries. Causes for high suicidality during the pandemic are probably low coping skills, low resilient people, pre-existing mental illnesses like depression and anxiety. Studies have shown that social isolation and subjective sense of being lonely are associated with suicidal ideation (39)

It is very important to identify people with suicidal ideation in normal people and COVID patients. The precipitating and predisposing factors should be assessed and treatment of the underlying mental illness will be helpful for the COVID patients which could prevent most of the suicides.

#### CONCLUSION

The current shortage of health care professionals, especially frontline health care workers amid the COVID-19 pandemic, means that reducing working hours might be a challenge in the short-term. Several intervention strategies, including strengthening the awareness that health care workers need basic healthy lifestyles, have been recommended to support their mental health.(40)

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