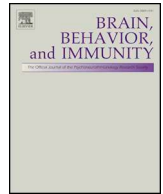




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COVID-19 suicides in Pakistan, dying off not COVID-19 fear but poverty? – The forthcoming economic challenges for a developing country



ARTICLE INFO

Keywords:

COVID-19 suicide
 Coronavirus suicide
 Poverty and suicide
 Economic recession
 COVID-19 & mental health
 Suicides in Pakistan

1. Introduction

The coronavirus disease (COVID-19) pandemic has created a major mental health challenge throughout the world (Mamun and Griffiths, 2020a). Like the previous pandemics, the unimaginable mental sufferings such as depression, panic, fear, anxiety, stress, trauma, adjustment disorder, etc. are reported in general people as well as healthcare professionals (Ahorsu et al., 2020; Frank et al., 2020; Jahanshahi et al., 2020; Montemurro, 2020; Sakib et al., 2020). These psychiatric sufferings are also accounted for about 90% of the global suicide occurrences in the extreme cases (Mamun and Griffiths, 2020b), similar finding is also reported in the aftermaths of the traumatic events (Mamun and Griffiths, 2020c). Thus, suicide rate increment during and afterwards a pandemic is not highly unexpected, but more common. For instance, the COVID-19 fear leads to suicide completion that is reported in Pakistan's neighborhood countries like Bangladesh, India (e.g., Goyal et al., 2020; Mamun and Griffiths, 2020). Besides, another non-representative study utilizing only 7-cases claims that the global COVID-19 suicide risk factors to be – (i) social isolation and distancing, (ii) economic recession, (iii) mental problems among healthcare professional, and (iv) social boycott and discrimination etc. (Thakur & Jain, 2020). The study is not representative as of it does not consider the COVID-19 suicide cases based on either global or a representative country. Hence, the conclusion of the global COVID-19 risk factors is arguably limited by selecting one suicide case for each causality, that also limits in overrating the prominent risk factors more generally in the crisis time. Besides, the decreasing of German Finance Minister is reported for economic recession suicide case rather than considering the general economic recession victims, that is totally unable to convey the evidence of lockdown-related economic recession suicides among the general people (Thakur & Jain, 2020). These non-representative and selective findings lead us to investigate the actual COVID-19 suicide causalities by considering all the COVID-19 suicide cases from a developing country (e.g., Pakistan).

2. Cases

Like the previous retrospective suicide researches conducted in the Pakistan's neighborhood south Asian countries (e.g., India, Armstrong et al., 2019; Bangladesh, Mamun et al., 2020a,b) where the national suicide database is unavailable, the present study followed the methods of extracting suicide data from press reports. Since January 2020, a total 29 suicide cases were reported in Pakistani press media (i.e., news reports in both English and Urdu languages). Of these, 16 suicidality cases (i.e., 12 completions and four attempts) were related to COVID-19 issues and were included in this study. About 12 were males, most of the victims had suffered from economic recession and only four were feared of COVID-19 infection (Table 1).

3. Discussion

Based on the aforementioned COVID-19 suicide cases, it is clear evident that most of the Pakistani cases occur due to the lockdown-related economic recession. Although previous case studies from the Pakistan neighborhood countries, such as in Bangladesh and in India, the first COVID-19 suicides are reported to be due to fear of infection and social boycott (Goyal et al., 2020; Mamun and Griffiths, 2020a, 2020b). Besides, social isolation and distancing and economic recession are also reported for suicide causality in another non-representative study (Thakur & Jain, 2020). However, the present study provides an actual COVID-19 suicides figure on economic recession in general people more rigorously that is not reported in the previous study by Thakur and Jain (2020). Similar to Pakistan, other developing countries' (i.e., Bangladesh) study also reports economic distress in all but one suicides (Bhuiyan et al., 2020), although fear of infection is the prominent risk factor in India (Dsouza et al., 2020).

The economic recession is defined as the contractions within an economic cycle, which reduces the economic productivity that is usually measured by gross domestic product and unemployment rate

Table 1
Distribution of the Pakistani COVID-19 suicide cases.

Cases	Suicide date	Victims' state	Gender	Age	Suicide reasons	COVID-19 suicide reporting news report source
Case 1	18 March	Mayo Hospital, Lahore, Punjab	Female	NR	Fear of infection (suspected)	https://dailyausaf.com/pakistan/news-202003-57141.html
Case 2	28 March	Mehmoodabad, Sindh	Male	35	Economic recession and distress	http://asianews.it/news-en/Fearing-Covid-19-infection-father-of-poor-family-commits-suicide-49740.html
Case 3 (attempt)	9 April	Bharchoond village, Sindh	Female	35	Economic recession and distress	https://www.pakistantoday.com.pk/2020/04/09/woman-attempts-suicide-due-to-lockdown-induced-poverty/
Case 4	9 April	Mubarak Shar, Khairpur, Sindh	Male	NR	Economic recession and distress	https://www.thenews.com.pk/print/641581-three-residents-of-khairpur-commit-suicide-due-to-hunger-during-lockdown
Case 5	9 April	Peer Muhailla, Gambat, Sindh	Male	NR	Economic recession and distress	https://www.thenews.com.pk/print/641581-three-residents-of-khairpur-commit-suicide-due-to-hunger-during-lockdown
Case 6	9 April	Khairpur, Sindh	Male	NR	Economic recession and distress	https://www.thenews.com.pk/print/641581-three-residents-of-khairpur-commit-suicide-due-to-hunger-during-lockdown
Case 7 (attempt)	10 April	Orangi town, Karachi, Sindh	Male	NR	Economic recession and distress	https://www.deccanherald.com/international/elderly-pakistani-man-kills-self-fearing-coronavirus-826662.html
Case 8	17 April	Lahore, Punjab	Male	68	Fear of infection	https://www.bbc.com/urdu/pakistan-52363170
Case 9 (attempt)	19 April	Sardogha, Lahore, Punjab	Male	60	Economic recession and distress	https://tribune.com.pk/story/2202898/1-suspected-covid-19-patient-attempts-suicide/
Case 10 (attempt)	20 April	Jamshoro, Sindh	Male	NR	Fear of infection and COVID-19 work stress	https://waqnews.tv/21-Apr-2020/128488
Case 11	21 April	Korangi, Karachi, Sindh	Male	24	Economic recession and distress	https://tribune.com.pk/story/2208405/1-suspected-covid-19-patient-commits-suicide-karachi-hospital/
Case 12	27 April	Karachi, Sindh	Male	37	Fear of infection	http://www.jasarat.com/2020/04/10/suicide/
Case-Miscellaneous	24 March to 10 April	Additional four victims (i.e., two males and two females) were suspected to have committed suicide due to lockdown-related issues like losing employment status in Mangopir, Orangi Town, Malir Pandhar and Surjani Town of Karachi, Sindh by the police authorities.				

NR - Not reported.

(Oyesanya et al., 2015). Any destructions in economic cycle leads to lower gross domestic product and higher unemployment rates in a country. The economic recessions are estimated to affect significantly on the people mental health and wellbeing by magnitude the relative and attributable risks. Research indicates a significant adverse effect of job loss and unemployment on mental health sufferings like depression, anxiety, stress etc. (Rafi et al., 2019), which act as the mediators of suicide attempt and completion (Mamun and Griffiths, 2020b). Based on a systematic review, 31 global studies exhibit a positive association between economic recession and increased suicide rates (Oyesanya et al., 2015). However, the present findings also support the previous literatures of increasing suicide rates during the financial crisis and economic constraints in the lockdown.

The COVID-19 crisis threatens to excessively by hitting undeveloped and developing countries like Pakistan, not only as a public health crisis in the short term but as a devastating economic and social crisis over months and years to come. For instance, \$220 billion income losses are expected in developing countries according to the United Nations Development Program (UNDP, 2020). For the Pakistani economy, was projected by the Asian Development Bank to decrease by 3.3% in 2019 to 2.6% by 2020, and this inflation likely to persist around 11.5% for 2020 (Augustine, 2020). Presently, Pakistan is facing many challenges including poverty, food insecurity and unceasing natural and manmade disasters etc. The country has a 24% of the total population living below the national poverty line and 38.8% are poor based on the Multi-dimensional Poverty Index (Humanitarian Response, 2019). This nastiest situation is also reflected in food security as a bleak picture. For instance, 20.5% of the total population is reported to be undernourished during the 2015–2017 time-period according to a recent report (Humanitarian Response, 2019). Thus, the COVID-19 lockdown is a tough choice for a country like Pakistan as a large number of poor people will be starving to death.

The present suicide reports from Pakistan are not only tensing the country, but also rising concerns for other underdeveloped and developing countries around the world. Globally 55% of the people are estimated to have no proper social protection, these losses will reverberate through societies, will impact on education system, human rights as well as basic food security and nutrition in the most extreme cases (UNDP, 2020). At the COVID-19 pandemic time, such statistics alarms for the uprising unemployment status, poverty and starvation in the months to come, which are the mental health sufferings (as well as suicide completion, in the extreme cases) driving factors. But, we have no estimations on – how many periods the COVID-19 pandemic will persist, how many people have to starve, how many lives to sacrifice, and what will be the end of this crisis (Mamun and Griffiths, 2020a). However, the national and international authorities should focus on and support the unprivileged people for voluntary basis. Besides, no interest and optional moratorium on EMIs loans can be provided for reducing the financial recessions and burdens if the free succors are not possible with the worldwide limited resources. Lastly, the all types previous loans should permit to grant a moratorium up to the end of COVID-19 pandemic in combating the economic recession.

The study can be limited due to not documenting all the suicide cases in Pakistani press media, because of suicide being crime and related to social issues (i.e., fear of harassment, stigma and taboos, complicated legal proceedings etc.) in the country under (UCA News, 2020; Mamun and Griffiths, 2020d) the Penal Code - Article section 325. Despite the limitations, the present study by reporting all the available Pakistani COVID-19 suicide cases, provides a novel data on lockdown-related economic crisis and recession that has not studied elsewhere. And it is anticipated that the present findings will be helpful

in safeguarding the unprivileged people by turning national and international authority's attentions.

Role of the funding source

Self-funded.

Financial disclosure

The authors involved in this research work do not have any relationships with other people or organizations that could inappropriately influence (bias) their work.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgement

Meheede Hasan (of Nageswari D.M. Academy, Kurigram, Bangladesh) is highly acknowledged for his supports.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.bbi.2020.05.028>.

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