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Letter to the Editor

The first COVID-19 infanticide-suicide case: Financial crisis and fear of COVID-19 infection are the causative factors

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ABSTRACT

Background: The global suicide occurrences have been aggravated because of COVID-19 crisis-related issues such as fear of infection, the financial crisis, being infected with COVID-19, loneliness, social boycott, etc. Although two studies reported about the seven dyadic suicidality cases (i.e., suicide pacts), child homicide-suicide has not been studied.

Case presentation: On 14 May, two dead bodies (i.e., a 30-years old Indian woman and her six-month-old baby) were found in a Riyadh apartment complex. The perpetrator (a person who kills the others and later commits suicide) - a trained nurse, was in search of a job. The woman's husband was recently retrenched from his technician job at a company in Madinah Airport. Her husband was admitted to a hospital with symptoms related to the COVID-19 infection four days before the suicide incidence. The 70-year-old mother-in-law alerted the neighbors after finding that the apartment is locked from inside and there was no response on knocking the doors. After this, the neighbors gathered and called the police. Police found two dead-bodies after opening the flat and suspected that the child was killed before the woman committed suicide.

Conclusions: Based on the present findings, further child filicide-suicide possibilities in families with economically distressed and/or positive COVID-19 status are expected. Hence, proper financial supports, providing authentic information (COVID-19), and mental health promotional strategies are suggested for decreasing incidences of COVID-19 related infanticide-suicide cases.

1. Introduction

Like other stressful live events, the current COVID-19 pandemic has significantly increased psychological burdens throughout the world (Khan et al., 2020; Sakib et al., 2020; Tandon, 2020). As a consequence, these psychological sufferings (i.e., depression, fear of the COVID-19 infection, anxiety, stress, etc.) lead people to commit suicides by acting as proximal risk factors (Dsouza et al., 2020; Mamun and Griffiths, 2020a, 2020b). Whereas, the suicide risk is also increased by other distal risk factors such as academic distress, unemployment, relationship problems, poverty, etc. that are commonly submerged with psychiatric issues (Dsouza et al., 2020; Mamun and Griffiths, 2020c; Mamun et al., 2020a, 2020b). There are a number of studies that present the COVID-19 suicide cases and its causalities throughout the world (e.g., Bhuiyan et al., 2020; Dsouza et al., 2020; Griffiths and Mamun, 2020; Lathabhavan and Griffiths, 2020; Mamun and Griffiths, 2020d; Mamun et al., 2020c, 2020d; Mamun and Ullah, 2020; Syed and Griffiths, 2020 etc.).

For instance, the largest study by Dsouza et al. (2020) delineated the emerging trend from 69 Indian COVID-19 related suicide case reports that the fear of the COVID-19 infection (n = 21) is the prominent suicide causality followed by the financial crisis (n = 19), which are consistent with the major reasons found in the COVID-19 related suicides in Bangladesh and Pakistan (Bhuiyan et al., 2020; Mamun and Ullah, 2020). Other COVID-19 related suicide factors include - (i) positive test for the COVID-19, (ii) social boycott of the suspected cases, (iii) pressure to be quarantined for the suspected cases, (iv) loneliness due to lockdown, (v) COVID-19 work-related stress, (vi) unable to come back home

Received 3 July 2020 Available online 28 August 2020 1876-2018/© 2020 Elsevier B.V. All rights reserved. because of lockdown, (vii) unavailability of alcohol, (viii) being depressed due to exam postponement, etc. (Bhuiyan et al., 2020; Dsouza et al., 2020; Mamun and Griffiths, 2020c; Mamun and Ullah, 2020; Syed and Griffiths, 2020).

In addition, Griffiths and Mamun (2020) reported simultaneous pair-suicidality cases from four countries (i.e., Bangladesh, India, Malaysia, and the USA), which are usually referred to as suicide-pacts. A total of seven-couple cases are reported; in these pair suicidality cases, fear of infection, the economic crisis, social boycott, family conflict and pressure of not being able to return home from abroad were the suicidality risk factors (Griffiths and Mamun, 2020; Mamun et al., 2020d). In the family context, COVID-19 pair-suicide cases are usually reported among couples. However, less is known about kid-parent suicides and its risk factors in the COVID-19 era. Thus, the present research letter presents a recent incident of a kid-parent suicide case in Riyadh, Saudi Arabia.

2. Case presentation

On 14 May, two dead bodies (i.e., a 30-years old Indian woman and her six-month-old baby) were found in a Rivadh apartment complex. The perpetrator (a person who kills the others and later commits suicide) - a trained nurse, was in search of a job. The woman's husband was recently retrenched from his technician job at a company in Madinah Airport. Her husband was admitted to a hospital with symptoms related to the COVID-19 infection four days before the suicide incidence. The 70-year-old mother-in-law alerted the neighbors after finding that the





PSYCHIATRY

apartment is locked from inside and there was no response on knocking the doors. After this, the neighbors gathered and called the police. Police found two dead-bodies after opening the flat and suspected that the child was killed before the woman committed suicide.

3. Discussion

In suicidology, dyadic deaths are referred to as two persons' deaths (i.e., killing and suicide), wherein first victim is killed by perpetrator followed by the perpetrators' suicide (Berman, 1996). There are several forms of dyadic deaths such as murder (or homicide)-suicide, child homicide-suicide, suicide-pact, etc. (Griffiths and Mamun, 2020; Liem et al., 2011). Suicide committed immediately after one or more murders is known as homicide-suicide within non-familiar relationships (Liem et al., 2011); whereas, suicide-pact occurs, while there is an agreed plan between the two or more victims to commit simultaneous suicides at a close time (Griffiths and Mamun, 2020). Most of the suicide-pact usually happens within a close relationship (e.g., couple). However, recent cases have been reproted, where online schooling-related quarrel and the son and mother both feeling the father's/husband's oppression leads to the apparent suicide pact (Mamun et al., 2020).

However, child homicide-suicide is the killing of the child followed by parental suicide. There are three common types of child homicidesuicide, named as - (i) filicide-suicide (i.e., killing of a child over the age of 12 months), (ii) infanticide-suicide (i.e., killing of under one-yearold child), and (iii) neonaticide-suicide (i.e., killing of a child in the first 24 h after birth) (Debowska et al., 2015; Friedman and Resnick, 2007). Besides, child homicide-suicide can also be divided based on the motivational sources (e.g., i. altruistic, ii. acutely psychotic, iii. unwanted child, iv. accidental, and v. spouse revenge), and origin of the stimulus (e.g., i. battering mothers, ii. mentally ill mothers, iii. retaliating mothers, iv. unwanted children, and v. mercy killing) (see Debowska et al., 2015 for details). However, these types of suicide account for a minor portion of the total suicide occurrences. For instance, yearly 0.06 homicide-suicides per 100,000 persons are reported in England and Wales, whereas 0.38 in Japan, 0.21 in the United States, 0.07 in New Zealand, 0.11 in Australia, etc. (Liem et al., 2011).

This was evidently a case of an infanticide-suicide related to the COVID-19 distress. This case-study is the first report of a new type of dyadic death within family contexts (i.e., infanticide-suicide case), although COVID-19 related suicide-pacts have been reported previously by Griffiths and Mamun (2020) and Mamun et al. (2020d). Psychopathological factors like frequent depression, prior mental health treatment, psychosis, and suicidal behaviors, etc. are common infanticide-suicide causative factors. There are other group of factors comprising of chronic sufferings, unhealthy family processes such as violence, emotional and physical abuse, etc., which are also associated with incidences of infanticide-suicide (Debowska et al., 2015; Friedman and Resnick, 2007).

Based on the story reported in the media, the economic distress is likely to have acted as the stimulus for this infanticide-suicide case. There are growing pieces of evidence that indicate role of financial crisis and its economic fallout on mental instability (Oyesanya et al., 2015; Rafi et al., 2019). People with sudden poverty and economic distress may face life-threatening situation (Mamun et al., 2020e). This is true even in high-income countries of Europe and North America; Oyesanya et al., 2015). For instance, a recent systematic review reports that 31 studies (out of 38) found a significant and positive relationship in suicide increment rates following economic recession. Two studies of the systematic review found that the economic recession was a protective factor (negative association) from suicide; while, two studies did not find any associations, and three were inconclusive (i.e., do not lead to any conclusion; Oyesanya et al., 2015). In the present COVID-19 pandemic, the financial crisis was reported to be the most prominent suicidality risk factor in Bangladesh (i.e., in all but one suicide cases; Bhuiyan et al., 2020; Mamun and Griffiths, 2020d) and Pakistan (i.e., in

12 cases out of total 16 suicidality; Mamun and Ullah, 2020). Whereas, in Indians affected by the COVID-19, economic crisis was reported to be the second most contributor of suicide followed by the fear of infection (i.e., 19 and 21 cases, respectively out of a total of 69 suicides; Dsouza et al., 2020). Similarly, economic crisis is also reported for the risk factor of suicidal behaviors (Islam et al., 2020).

In the this first COVID-19 infanticide-suicide case, role of fear of infection may also be involved because the husband was already infected with the COVID-19. Although the six-month-old child was arguably safe from being infected with the virus, the woman would have mistakenly perceived him to be at risk of infection. This suggestively reflects deleterious role of COVID-19 misinformation. In many cases of COVID-19 related suicides, personal fear of infection and social boycott (imposed due to neighbors' misinformation and stigmatizations) were reported to drive suicides, even though the victims were later found to be negative for COVID-19 during the autopsy (Dsouza et al., 2020; Mamun and Griffiths, 2020d). Therefore, unexpected panic, and fear driven by the misinformation may be regarded as a public mental health challenge in combating the COVID-19 crisis.

4. Conclusions

This research letter reports about the first COVID-19 related infanticide-suicide case, which was likely related to the financial crisis and the fear of infection. These grim reasons may reflect the risk of many more such suicide incidences in poor families or those families whose member(s) is/are in quarantine with a positive COVID-19 status. Therefore, provision of financial supports for the needy people (see for Bhuiyan et al., 2020; Mamun and Ullah, 2020 for details), dissemination of authentic, updated and reliable COVID-19 related information to reduce panic and fear of COVID-19 (Ahorsu et al., 2020; Chang et al., 2020; Sakib et al., 2020), and implementation of mental health promotional strategies (see Mamun and Griffiths, 2020d for details) should be adopted as soon as possible. These measures may help decrease incidences of COVID-19 related infanticide-suicide cases.

Ethics statement

Not applicable to this study.

Compliance with ethical standards

Not applicable to this study.

Statement of human rights

Not applicable to this study.

Hazards and human or animal subjects

Not applicable.

Use of patient images or case details

Not applicable.

Originality and plagiarism

Originality is strictly maintained, while plagiarism is applicable.

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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 report no declarations of interest.

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 - Mohammed A. Mamun^{a,b,*}, A.K.M. Israfil Bhuiyan^a, Md. Dilshad Manzar^c

^a Undergraduate Research Organization, Savar, Dhaka, Bangladesh ^b Department of Public Health and Informatics, Jahangirnagar University, Savar, Dhaka, Bangladesh

^c Department of Nursing, College of Applied Medical Sciences, Majmaah University, Majmaah, 11952, Saudi Arabia

* Corresponding author at: Undergraduate Research Organization, Savar, Dhaka, 1342, Bangladesh

E-mail addresses: mamunphi46@gmail.com, mamun.abdullah@phiju. edu.bd (M.A. Mamun), akmisrafilbhuiyan@gmail.com (A.K.M.I. Bhuiyan), m.manzar@mu.edu.sa (Md.D. Manzar).