

Letter to the Editor

A rare case of Bangladeshi student suicide by gunshot due to unusual multiple causalities

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Introduction: The World Health Organization (2018) asserted that suicide is the second leading cause of injury-related death among 15-29 years globally. In Bangladesh (where the present case was reported), and based on suicide press reports, one study reported that 61% of all cases were reported to be students less than 30 years old (Shah et al., 2017). A wide range of risk factors for students' suicide have been determined globally including stressful academic environments, trouble with relationships (personal and/or family), internal family and parental problems, financial crisis and threats, alcohol and substance abuse, exposure to traumatic life-events, feelings of social isolation, and other psychiatric problems (e.g., mood disorders, anxiety disorders, sleep problems, loneliness, post-traumatic stress disorders, etc.) (see Yozwiak, Lentzsch-Parcells, & Zapolski, [2012] for a review of student suicide). As with suicide causality among student populations worldwide, relationship problems, academic complexities, and parental relationship problems are the most frequent reasons for Bangladeshi student suicide deaths (Arafat & Mamun, 2019).

Case report: The suicide victim was an 18-year-old male Bangladeshi second-year commerce student at Dhaka City College who originally came from the village of Kaliganj (in Jhenida). He was the oldest child of a policeman in the Ramna Police Division. The victim shot himself in the right side of his head with his father's licensed pistol early one Sunday morning (8am) although the bullet was eventually removed from the left side of his brain. He shot himself while his younger brother and younger sister went out for a walk with their father. (It was also reported that his twin brother had died soon after being born). The family were currently living in the Azimpur Government Staff quarters. It was reported in media (based on his family's accounts and his suicide note) that the victim was a "gentle boy" but said to be very stressed about an upcoming examination because he did not get the highest marks in his previous examination. It was also reported that he suffered from some mental health problems (i.e., depression and distress). It was also claimed by his father that he was addicted to playing videogames. In his bedroom suicide note he wrote that (in reference to the videogames he played) that "*even in death, I will be hero*". It was also claimed that he was not happy with his physical appearance (i.e., obesity and being black in skin color). This brief case study is based on over a dozen news stories that appeared in the Bangladeshi print media. A full list of the sources is available on request from the first author).

Discussion: Very few previous studies have examined student suicide separately and no case in Bangladesh has ever previously reported death by gunshot wounds. The reasons for committing suicide are not clear but appears to have been due to a combination of mental health issues and body image issues (which may or may not have been related). His alleged gaming addiction appears to have been symptomatic of these other underlying problems. Previous literature concerning individuals with gaming disorder has indicated that it can be associated with a wide range of physical and mental health complaints (e.g., Kuss & Griffiths, 2012; Mamun & Griffiths, 2019a; Mentzoni et al., 2011) including an increased risk of suicide (Messias et al., 2011). More recently, Mamun and Griffiths (2019a) reported on the alleged psychosocial consequences eight Indian males with gaming problems associated with the *PUBG (PlayerUnknown's Battlegrounds)* videogame. One case involved a suicide attempt when a 14-year old boy deliberately swallowed poison in a fit of anger when his mother took away his smartphone because he was playing *PUBG* too much, and another case involved an 18-year old teenager who committed suicide (by hanging himself) after his parents refused to buy him an expensive smartphone to play *PUBG*.

Empirical research relating to the role of weight-based teasing, body uneasiness, and excessive weight and image concerns in suicide causation is unclear. In a systematic review (Klinitzke et al. 2013), eight studies were reported that evaluated the relationship between completed suicides and suicide and reported an inverse relationship between BMI and suicide (i.e., six studies showing obese individuals are less likely to commit suicide than individuals of low or normal weight), with one study showing no association and one study showing a positive association. However, BMI as a risk factor in suicide has been found to be dependent upon gender, with women who are obese reporting more suicide attempts and suicidal ideation

than obese men (Klinitzke et al. 2013). Although, the evidence on the association between obesity and suicide has been mixed, obesity is a risk factor and associated with other mental disorders (i.e., major depression, bipolar disorder, and anxiety disorders; Elovainio et al., 2009; Simon et al., 2006), and such disorders are highly prevalent among suicide victims. Therefore, obesity might be a mediating factor (i.e., a distal risk factor) in successful suicides such as the present case (i.e., obesity was not major cause of suicide but could perhaps have been a mediating factor).

Although not explicitly mentioned in the press reports, the police suspected the victim may have been bullied and/or ignored at school by his peers and was personally dissatisfied with his physical attributes. Such factors also increase the likelihood of mental health disorders such as depression, anxiety, eating disorders, substance use, etc. (Kaltiala-Heino et al., 2000). It is well-established that approximately 90% of the suicide cases occur due to these common mental health problems (Arafat, 2019a). The present case also reported as suffering from mental distress and depression. The victim was also reported to be experiencing academic distress which is the most common cause of suicide among all students both in Bangladesh and other countries more generally (Arafat & Mamun, 2019; Yozwiak, Lentzsch-Parcells, & Zapolski, 2012).

In Bangladesh, there are a few retrospective suicide studies examining the general population, but none of these studies has ever reported suicide cases being associated with body image issues and gaming disorder (Ali et al., 2014; Arafat, 2019a; Arafat, Mali, & Akter, 2018; Arafat & Mamun, 2019; Begum et al., 2017; Feroz et al., 2012; Mamun & Griffiths, 2019b; Mashreky, Rahman, & Rahman, 2013; Salam et al., 2017; Shah et al., 2017; Shahnaz et al., 2017). Most suicides are due to marital and relationship discord, familial disharmony, sexual harassment, financial problems, psychiatric illness, and exam failure (Arafat, Mali & Akter, 2019; Shah et al., 2017). Non-representative studies conducted among Bangladeshi students suggest that relationship and academic problems are the main reasons for suicide (Arafat & Mamun, 2019).

Also notable is the fact that this is the first reported Bangladeshi case of death by gunshot. In Bangladesh, and based on retrospective suicides, hanging has been reported as the most common suicide method (i.e., 82.3% in Shah et al. [2017]; 60.9% in Arafat, Mali & Akter, [2019]), although a wider range of suicide methods (including gunshot suicides) are seen globally [including Germany (Cibis et al., 2012); Turkey (Göktaş & Metintaş, 2019); India (Arya et al., 2019; Kumar et al., 2017); Taiwan (Chen, Kwok, & Yip, 2012); and Finland, Japan, South Korea and United States (Park, 2015)]. However, a recent review argued that the use of unusual methods to commit suicide can be a big challenge in preventing suicide among susceptible individuals (Arafat, Chowdhury, & Mohit, 2018). It is likely that the present case where the teenager used his father's firearm could not have been anticipated based on previous Bangladeshi suicides because there has never been a previous case of using a gun to commit suicide by anyone in the country.

Conclusions: Suicide is a neglected public health problem in South-Asian countries including Bangladesh. The country still lacks suicide surveillance, a national suicide database, and national suicide prevention strategies that are needed to help reduce suicide (Arafat, 2019b; Mamun & Griffiths, 2019b). Additionally, the country has lack of school-based mental health support programs which might be helpful in facilitating respectful relationships between individuals, their friends, and their peer groups. Such programs could also incorporate interventions on how to cope with academic distress and personal life crises (e.g., relationship problems). In relation to the factors and causes of suicide in the case presented here, there are both factors that have been associated with other student suicides globally (e.g., academic distress, mental health problems) and factors that have not been associated in previous Bangladeshi suicides (i.e., death by gunshot, possible body image issues relating to obesity, and alleged gaming disorder). Consequently, it is recommended that all these factors need to be included in the development of school-based mental health supports programs in Bangladesh.

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