Suicidal behaviour and the coronavirus (COVID-19) pandemic: Insights from Durkheim's sociology of suicide

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The outbreak of a novel coronavirus (COVID-19) which emerged in China in December 2019 is much more invasive than any usual health crisis the world has ever witnessed (van Bavel *et al.* 2020; UN 2020). Globally, its impact has caused serious human and social catastrophe, which lead the World Health Organisation (WHO) to declare it as a global pandemic (van Bavel *et al.* 2020; UN 2020). It is regarded as one of the most devastating pandemics in the history of the world. To curb and control the spread of the virus, countries around the world adopted several unprecedented measures which have compelled us to live in uncharted territory and in a state of extreme uncertainty (Inoue and Todo 2020; UNDP 2020). These new measures include: limiting public gatherings; closing borders with other countries; shutting down public, private, and business organisations; enforcing social distance; social isolation or quarantining of citizens; and, in some cases, complete or partial lockdown of cities, regions, and even whole countries (Inoue and Todo 2020). The COVID-19 outbreak has the potential to create devastating socio-economic and political upheaval and deep scratches in every society (UNDP 2020). Effects are rampant and spreading in the forms of group and existential threat, distrust, violence, negative emotions, fake news, misinformation, conspiracies, zero-sum thinking, political polarisation, panic, ethnocentrism, prejudice, and discriminant treatment of survivors, their families, and the groups and individuals who are thought of as under a heavy influence of the virus resulting in a denial of human rights and disrespect to human dignity (van Bavel *et al.* 2020). It has been apprehended that the social and economic impacts induced by the COVID-19 pandemic may trigger suicidal risk behaviour (Druzin 2020). For example, the leading suicide crisis hotlines in the United States reported a 300% surge in calls since the COVID-19 pandemic began (Cunningham 2020). Whilst suicide is well-established as a critical global public health concern causing around 800,000 deaths annually along with many more attempts (WHO 2019), there is concern that the impact of the COVID-19 pandemic will intensify the injury burden. Contextualising this unwelcoming catastrophe in relation to suicidal behaviour from a sociological standpoint might provide important outlooks for policy interventions. Our aim here is to critically reflect on the connectedness between COVID-19's impact and suicidal behaviour (including suicide and suicide attempt) using French sociologist Emile Durkheim's (1858–1917) sociology of suicide.

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Durkheim's theory of suicide

Durkheim was most influential in shaping the structural-functional paradigm in sociology, which explained the dynamics of social structure (Ritzer 1992). He is also regarded as the founding father of the scientific study of suicide (Goldney and Schioldann 2000). His *Le Suicide* (1897) opened the door for sociological investigations on suicide, and it contributed to the advancement of sociology as a theoretical and methodological discipline in academia (Fincham, Langer, Scourfield and Shiner 2011). Its influence traverses beyond sociology as it is an important source of reference for other disciplines analysing suicide (Jaworski 2010). In *Le Suicide,* Durkheim explained suicide as a social fact that is only understandable within the social context, external to or coercive of the individual act or event as commonly understood by philosophy, ethics, psychiatry, or psychology (Tomasi 2000). He also highlighted its association with several extra-social factors such as mental illness, imitation, climate, and temperature (Durkheim [1897] 2005; Wray, Colen and Pescosolido 2011). The crux of Durkheimian sociology is that people kill themselves when they are forced to by social forces (Pickering and Walford 2000).

Durkheim considered suicide as an act, positive or negative, carried out by the victim who is aware of the fatal outcome, while attempted suicide stops before occurring at the fatal outcome (Durkheim, [1897] 2005). Durkheim developed a four-fold schema of suicide, namely, egoistic, altruistic, anomic, and fatalistic. He further explicated them according to two social forces, that of regulation and integration (Durkheim, [1897] 2005; Khan, Ratele and Dery 2020), and hypothesised that societies require a critical level of social regulation and social integration to obtain protection from suicide when there are extreme fluctuations in levels of integration (i.e., the extent to which the individuals are tied together in social networks) and regulation (i.e., the extent to which aspirations and emotions of individuals are regulated by norms and customs of the society). He explained that when members of the society fall short of these required social rules and goals, it might push some of them to the brink of suicide (Cleary 2019; Lester 2008). Altruistic suicide occurs due to a high degree of social integration while egoistic suicide occurs due to a low degree of social integration. Conversely, fatalistic suicide is linked to a high degree of social regulation while anomic suicide is caused due to low-level regulation (Durkheim, [1897] 2005; Lester, 2008). We will have further opportunities to discuss these typologies under the respective contextual praxes in the following analysis.

Methodology

An online search for English-medium newspaper databases was conducted to identify suicide and attempted suicide cases linked with the COVID-19 pandemic. The investigation period was from 1 January to 30 April 2020. Keywords include, "suicide and COVID-19", "suicide attempt and COVID-19", "suicide and coronavirus", and "suicide attempt and coronavirus". While undertaking the search and data analysis, authors remained cognisant of the reliability of data. Although suicide is a complex phenomenon associated with multiple risk factors, developing an association between suicide and the current pandemic might be fallacious, imprecise, and over-simplified. The International Association for Suicide Prevention (IASP) has, therefore, suggested that media take caution about reporting on the suicide and COVID-19 pandemic relationship so that it is not over-generalised (Reidenberg and Niederkrotenthaler 2020).

Our search identified 29 COVID-19-related suicide cases. After careful deliberation, only 28 cases from 10 countries were included for analysis. Where probable, each potential case was screened on its validity by searching for additional information from other sources. Despite our best efforts for exclusive inclusion, we might have missed out on some cases. We consulted the reports that were published in English only and did not apply any exclusion criteria with regards to demographic profiles, location, and the types of suicidal behaviour. Out of the 28 identified cases, three were suicide attempts, one was a homicide-suicide/pact-suicide, and 24 were suicides. Cases were depicted from Bangladesh (two cases), France (one case), Thailand (three cases), Germany (one case), India (eight cases), Pakistan (four cases), Italy (one case), Saudi Arabia (one case), UK (three cases), and the United States (four cases). Since the newspaper reports were published online and publicly available, no formal ethical clearance was needed. We identified the survivors in the way they were presented in the newspapers. The incidents took place in February

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(two cases), March (13 cases), and April (13 cases). We employed a case analysis.

Results: Case analysis under Durkheim's typology

Anomic suicide

Eight cases can be considered as anomic suicides, and they occurred in Germany, Pakistan, Bangladesh, Thailand, and the United States.

Germany, March 2020. Thomas Schaefer, a 54-year-old finance minister of Germany's Hesse state died by suicide near a railway track due to his deep concern about the COVID-19 pandemic and how to deal with the ensuing economic consequence. The deceased minister had worked relentlessly to tackle the crisis, but he struggled with the thought of how to meet the huge expectations of people and manage the flow of financial aid. The state governor, Mr. Volker Bouffier expressed his dismay: "I have to assume that these concerns overwhelmed him. He obviously couldn't find a way out" (Stubley 2020).

Pakistan, April 2020. A labourer named Shobhal Shar committed suicide due to unemployment for several days owing to the government-imposed lockdown. Although he endlessly sought help from friends and relatives, no one assisted. Thus, due to the inability to manage a livelihood for his starving children, he ended his life by self-immolation through severe burn injuries (Hussain 2020).

Pakistan, April 2020. Labourer Shahzeb Sahitto attempted suicide by self-immolation. He was experiencing a hard time as he was unable to provide food to his starving family due to continued unemployment caused by the COVID-19 pandemic. He relocated searching for work and help but he was met with indifference (Hussain 2020).

Pakistan, March 2020. Sarfaz Masih, a 35-year-old daily wage earner employed at a gas station was his family's primary provider. On March 22, the gas station employees were fired due to government-imposed lockdown. That same day he fell ill with COVID-19 symptoms and the doctor suggested he remain in isolation. As his condition deteriorated, his wife advised him to consult another doctor, but they had no money to afford it. Moreover, the money he kept for the preparation of his child's birth was consumed by rent and food expenses. The fear of infecting his family with COVID-19 coupled with economic distress drove him to carry out suicide (Khokhar 2020).

Thailand, April 2020. Maha Sarakham, a mother of two children, lost her job as a drinking yoghurt salesperson due to the COVID-19 pandemic. Due to her inability to buy milk for her baby and pay her bills, she hung herself. She was found in her house and rushed to hospital, but she died on the way (The Nation Thailand 2020a).

Thailand, April 2020. A man hung himself to death on Facebook live. Family and friends were helpless to stop him due to the night curfew. His mother stated that her son was in tremendous distress after losing his job because of the pandemic crisis (The Nation Thailand 2020b).

USA, March 2020. Roderick Bliss, a 38-year-old Pennsylvania man, upset over losing his job due to the COVID-19 pandemic, shot his girlfriend four times before killing himself in an attempted murder-suicide. The girlfriend fortunately survived (Burke 2020).

Bangladesh, April 2020. A 30-year-old Bangladeshi man named Wahidul Islam died by hanging. He was debt-ridden and unable to find work to provide for his four children. Furthermore, securing food for his family amidst the nationwide shutdown, due to the COVID-19 outbreak, proved difficult and they had been starving for a week as they received no relief from any organisation or the government (Prothom Alo 2020).

The anomic type of suicide is most prominent when society goes through extensive crisis or disruption (Tomasi 2000). As per Durkheim's ([1887] 2005) explanation, when there are disturbances in the existing regulatory process, and the society undergoes intense and stressful situations, the impulse to suicidality increases. All the above cases encountered serious disruptions during this crisis period.

Altruistic suicide

Three cases, considered as altruistic suicide, occurred in Italy and India.

India, February 2020. Bala Krishnayya, a 50-year-old man who feared he had contracted the deadly

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COVID-19 virus, fell ill a few days before the incident. The doctor diagnosed him with a viral infection and advised him to wear a mask so that the infection did not spread. He misunderstood the doctor's advice and thought he was infected with COVID-19. After returning home, he informed all that he had contracted the deadly virus and forbade his family members, relatives, and neighbours to come close to him. His son mentioned, "My father kept on watching coronavirus related videos the whole day and said he has similar symptoms as the deadly virus. He told us that he feared the deadly virus could spread to us and others could get infected as well if they came close to him. When any of us tried, he pelted us with stones". On the night of the incident, he bolted his home from the outside and left to hang himself on the outskirts of the village. His son furthered, "My father was worried that the virus would spread to us. He hanged himself to save us" (Apparasu 2020; Raghavan 2020).

India, March 2020. Akkala Venkataiah, a 55-year-old man killed himself by hanging from a tree. His relatives said he had placed himself under self-quarantine after returning home from work in a neighbouring city, Hyderabad. Meanwhile, there was a public announcement from the village that those who came from Hyderabad and other areas must register with the local administration. Following the announcement, he informed his son that he suspected he had contracted the COVID-19 virus and feared that he could infect his family members and villagers. Thereafter, he killed himself (Pavan 2020).

Italy, March 2020. Daniela Trezzi, a 34-year-old Italian nurse, treated COVID-19 patients at a hospital located in the worst-affected region of Lombardy. Ms Trezzi killed herself after testing positive for COVID-19 as she feared that she may have spread the virus to others. The National Federation of Nurses of Italy confirmed that Ms Trezzi and many other nurses treating quarantined patients showing COVID-19 symptoms felt "heavy stress for fear of having infected others" (Smith 2020; Stickings 2020).

Altruistic suicide occurs when an individual with extensive prosocial behaviour perceives it as their duty to kill themselves. Under certain conditions, it is the society that compels members to kill themselves for social ends (Durkheim [1897] 2005). When altruistic suicide is characteristically performed as a duty, it falls under the category of obligatory altruism. However, when it is not expressly imposed by society, but an option only, it falls under the category of optional altruism (Durkheim [1897] 2005). The above examples may be considered as optional altruism deriving from the possibility of infecting others while considering personal good as secondary to others.

Fatalistic suicide

Seven cases were considered as fatalistic suicide, and they occurred in Bangladesh, India, and the UK.

India, March 2020. A man who had recently attended Muslim religious Tablighi Jamaat gatherings in New Delhi – a gathering treated as a hotbed for COVID-19 infections in India – attempted suicide by jumping from the sixth floor of a hospital building. The man was admitted to the hospital as he was suspected to be COVID-19 positive (Ojha 2020a).

India, March 2020. A 35-year-old man allegedly carried out suicide by jumping off the seventh floor of a hospital in New Delhi. The deceased returned from Sydney, Australia, and complained of a headache on his self-report form at the airport. Subsequently, he was brought to the hospital by the authority for treatment as a suspected COVID-19 patient. After admission, he was immediately placed in the isolation ward but he managed to escape and jumped off the building to his death (Ojha 2020b).

India, April 2020. Another man, aged 30, who had also attended the same Tablighi Jamaat gatherings in New Delhi, committed suicide at a hospital in the state of Maharashtra. He tested positive for COVID-19 and was admitted to the hospital. The man used a blade to cut his throat inside the washroom of the isolation ward (Singh 2020).

UK, April 2020. Daniel Furniss, a 34-year-old British man killed himself as he was overcome with loneliness during the lockdown due to social distancing. His sister indicated that he was highly vulnerable due to his diabetes, so he was forced into stringent isolation as an extra precaution. Being an extrovert, it was difficult for him to adhere to these guidelines as he had strong social

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networks and loved socialising with his friends and his brother at the park (O'Neill 2020).

UK, March 2020. Kian Southway, a 15-year-old from South Wales, UK, killed himself as he felt disturbed amidst the COVID-19 lockdown. His mother said that for a few days he mentioned that he felt "isolated from the world" due to being kept indoors. His family described him as a thoughtful boy who loved everybody. He was very active and had a black belt in kickboxing. His rugby club paid him tribute and called him "sociable" (The Science Times 2020).

UK, March 2020. Emily Owen, a 19-year-old waitress died in a hospital following a suicide attempt due to possible fears and/or sufferings of "isolation" amid the COVID-19 outbreak. A few days before the incident, she warned her relatives about her personal worries with the pandemic (Miller 2020).

Bangladesh, March 2020. A young Bangladeshi man named Zahidul Islam hung himself to death. The main factor that triggered him to carry out suicide was the prejudice and suspicion he felt from members of the village who thought he had been infected with the virus. However, no virus infection was found as per the autopsy report (Daily Bangladesh 2020).

Saudi Arabia, February 2020. A Chinese student in his thirties carried out suicide by jumping from the third floor of a hospital building where he was under quarantine on suspicion of being infected with the virus (Middle East Monitor 2020).

The respective countries where the above incidents took place have imposed the necessary and strict regulations, such as forced lockdown, isolation, and compulsory medical check-ups at ports. Durkheim described that fatalistic suicide happens in the event of "ineluctable and inflexible nature of a rule against which there is no appeal" (Durkheim 2005, p.276). In the same vein, it may be stated that the above cases are explicit descriptions of fatalistic suicide which is caused due to excessive social regulation and oppressive discipline (Durkheim [1897] 2005). The two cases of the Indian men who had attended the Muslim religious gathering Tablighi Jamaat confirm a different node of fatalistic suicide. This religious gathering in March 2020 was commonly implicated as spreading COVID-19 in India (Ahmed 2020). The Bangladeshi case, on the other hand, indicates that suicide was provoked due to prejudice of infection by the locals in the community (Mamun and Griffiths 2020). People carrying COVID-19 or those suspected of carrying the virus are subjected to social stigma, hatred, xenophobia, and denial of treatment in Bangladesh due to fear (Kamal 2020).

Egoistic suicide

Nine cases are due to egoistic suicide which took place in Bangladesh, Pakistan, France, India, Thailand, and the United States.

France, April 2020. Bernard Gonzalez, a 60-year-old doctor who served the French football Ligue 1 club Reims died by suicide after being diagnosed with COVID-19. He had a strong influence across his network. His club observed his mourning, and some narrated: "Devastated, Reims cries for Bernard Gonzalez"; "Not just the club but also hundreds of men and women in Reims"; "He will be missed by the football family and all those in Reims who met him"; "Not only was he the club doctor, but he was also the GP (general practitioner) of many people in Reims. He was known for his humane and professional qualities" (France-Presse 2020).

India, March 2020. Srinivas Rao committed suicide by pouring kerosene over him due to fear of being infected with COVID-19. He had been suffering from a fever and consulted doctors from a private hospital, but they diagnosed it as a normal fever. Even though he had no foreign travel history nor had he been in contact with any infected people, he developed the fear of contracting COVID-19 and panicked (Pandy 2020).

India, March 2020. A young man from Uttar Pradesh, India, died by suicide over suspicion that he was infected with COVID-19. He killed himself by slitting the veins of his neck and wrist. He left a suicide note stating that he had been infected with the virus (Pandey 2020).

India, March 2020. Another young man from Uttar Pradesh, India, killed himself by jumping in front of the train. A few minutes before taking the extreme step, the man told a railway employee at the station that he had been infected with COVID-19 (Pandey 2020).

Pakistan, April 2020. Hanif Ahmed, a 68-year-old Pakistani man committed suicide fearing that

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he contracted COVID-19 due to experiencing symptoms. Family members and neighbours suspected him of being infected with COVID-19. He also developed a strong fear upon learning that people with asthma have a high mortality rate. He bought petrol and went to a nearby graveyard where he set himself alight, burning to death. Police claimed to have recorded his statement just before his death where he indicated about his suspicion of having COVID-19 (Deccan Herald 2020).

USA, April 2020. Patrick Jesernik, a 54-year-old man from Illinois killed his 59-year-old wife, Cheryl Schriefer, and then shot himself to death. Both of them were found dead in two separate rooms of their house. There were no signs of domestic struggle, and the home's condition was neat and orderly. The family members informed police that Patrick had been afraid that he and his wife had contracted COVID-19. However, test results confirmed that neither of them were infected (Ruiz 2020). This is a case of homicide-suicide as well as a suicide pact.

USA, April 2020. A 55-year-old man from New York claiming to have COVID-19 and other underlying health issues made an emergency call and requested help from the police. He pulled out a weapon upon their arrival. The police requested he drop his weapon, but he defied their orders. They shot him nine times, injuring his hip and back. The man tested positive for COVID-19 and wanted to be shot dead by the police. A high official of the New York City Police Department said, "He is overweight, has diabetes, he thought he was going to die so he wanted the cops to shoot and kill him. So, this was apparently attempted suicide by police officer" (Dienst 2020).

USA, April 2020. Lorna Breen, the 49-year-old head of the emergency department at a Manhattan hospital committed suicide after serving for several days on the front line of the COVID-19 battle. She felt disturbed by continually witnessing the death and suffering of COVID-19 patients (Rosner and Sheehy 2020).

Thailand, April 2020. Bancha Lertpamarin, a 27-year-old man from Chiang Mai who worked as a waiter, took his life by jumping from the fifth floor of his apartment after learning that he had tested positive for COVID-19. He informed those close to him that he was infected with the virus (The Nation Thailand 2020c).

The above-mentioned cases are representative of egoistic suicide. Egoistic suicide considers individuals as not strongly integrated into the larger social unit and, as such, this lack of integration provides a sense of worthlessness (Ritzer 1992). Here, the self engulfs the social self, leading to a loss of collective conscience to excessive individualistic solidarity (Tomasi 2000) or exaggerated individualism (Durkheim, [1897] 2005). Durkheim states, "The individual yields to the slightest shock of circumstances because the state of society has made him a ready prey to suicide" (Durkheim [1897] 2005, p.215). Although we do not have exclusive details about the individualistic reflections of these cases, the trend of these cases may help us to conclude that the survivors of suicide perhaps prioritised their sufferings, shame, and griefs over their social networks, family members, and well-wishers.

Discussion

Applying Durkheim's theory of suicide to crisis situations

The aforementioned cases of suicidal behaviour concerning the COVID-19 pandemic maintain a strong theoretical embodiment of Durkheim's sociology of suicide. Unlike this deliberate case analysis, Durkheim adopted a positivist methodological standpoint and considered suicide rates as a social phenomenon to be analysed sociologically by studying the context of social environments in which they occur (Taylor 1982; Durkheim [1897] 2005, p.299). He said that "the sum of all these individual cases has its own unity and its own individuality, since the social suicide rates are a distinctive territory of each collective personality. That is, though these particular environments where suicide occurs most frequently are separate from one another, dispersed in thousands of ways over the entire territory, they are nevertheless closely related; for they are parts of a single whole, organs of a single organism, as it were" (Durkheim, [1897] 2005, p.322). From this standpoint, we find meaningful reasoning as to why we should be very concerned about the likely impact of the COVID-19 context on our society with regards to the danger of suicidal behaviour.

Durkheim's theory validates this evidence, which suggests that the spikes in suicide rates are

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a common trend during or after a crisis such as economic recession or depression, earthquake, floods, cyclone or hurricanes (Chang, Stuckler, Yip and Gunnell 2013; Fountoulakis *et al.* 2014; Krug *et al.* 1998; Oyesanya, Lopez-Morinigo and Dutta 2015; Yip 2009). Durkheim broadly viewed suicide as an effect of the crisis caused by rapid and constant social changes that inflict unbearable aches among individuals in society (Tomasi 2000). Very specifically, Durkheim explained how individuals and groups go through negative feelings and emotions during times of dramatic social change and turmoil, and how these disturbances make some groups and individuals more vulnerable than others to self-harming behaviour (Wray *et al.* 2011). It is suggested that the direction of the fluctuating suicide rates will depend on the nature of social changes (Durkheim [1897] 2005). From this perspective, there are potential explanations with regards to the increase of suicidal behaviour amongst various groups if this social malice continues for long.

The influence of gender on suicide risk

A key demographic feature is that suicide predominates among males, which validates the occurrences across regions, ethnic and socio-economic groups that men die by suicide up to four times the rate of women; not forgetting that women make more attempts than men (Player *et al.* 2015; Vijayakumar 2015). Durkheim attributed the higher rates of male suicides as related to men's higher intellectual faculties and moral capacity than women and women's asocial nature relative to men (Johnson 1979). He furthers that due to women's asocial and affective nature, they are less affected by social integration and thus suicide (Lehmann 1995). Women's traditional gendered roles, particularly their caring abilities, provide more immunity to suicide as they are less intensely involved than men in their social capacities and collective life outside the family (Cleary 2019; Pampel 1998; Reeves and Stuckler 2016). Here, Durkheim ([1897] 2005, p.299) explicates, "If women kill themselves less often than men, it is because they are less involved than men in collective existence; thus they feel its influence-good or evil-less strongly", and added, "Since she lives more than the man outside communal life, communal life penetrates her less: society is less necessary to her because she is not impregnated with sociability" (Durkheim [1897] 2005, p.215). Feminists criticised Durkheim's gender interpretation of suicide as it provides outdated assumptions about gender relations (Reeves and Stuckler 2016), and it deliberately configures the social construction of suicide as masculine and the socially significant or courageous action of a man (Cleary 2019; Jaworski 2010). Durkheim's gender works in suicide hold highly essentialist ideas about men and women (Cleary 2019), since men were viewed as possessing and women as lacking agency and rationality (Jaworski 2010). His theory on gendering suicide is simply erroneous and deeply embedded in ambivalent patriarchal ideology (Lehmann 1995). Moreover, Durkheim's claim is not strongly validated by the data he used, and in no way is female suicide less sensitive – it is often more so than male suicide in the event of social variations (Besnard 2010).

It is not our intention to discursively argue with Durkheim's social ontology of gender but rather state our concern that both men and women may, in the same way, be the prey of the social contexts of suicide. In our analysis, out of the 28 cases (three suicide attempts, one homicide-suicide/pact-suicide, and 24 suicides), all but four are men. As we have not extended our search beyond the study period, we do not know how many more females (and males) have taken their life due to COVID-19 complications and their likely situatedness in terms of Durkheim's four-fold schema.

Applying Durkheim's four-fold typology of suicide

The Italian frontline worker demonstrated her superordinate altruism. Such female suicidal behaviour broadly contradicts Durkheim's epistemic standpoint that propagates women as "asocial" or "lack[ing] in collective existence" (Lehmann 1995); this female worker sacrificed her life to the larger goal of the collective good (Johnson 1979). Given the Durkheimian postulation that women have less social involvement and lack of moral posture, it seems to be impossible for them to demonstrate altruistic suicide (Jaworski 2010; March 1982).

One female case seems to fall into the Durkheimian category of anomic suicide. Such suicide stems from lack of social regulation (Cleary 2019), which is often connected with the economic conditions of the society (Puffer

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2009). If, according to Durkheimian theorisation, suicide is predominantly a moral phenomenon, and as women are pre-moral, disturbances or breakdown in the regulative system (anomic) of the society should have a minimal effect on women (Jaworski 2010; March 1982). This particular case, understandably, stands against Durkheimian theorisation of anomic suicide. Similar to men, women may also be disturbed by the anomic conditions (e.g., COVID-19) of the society.

The homicide-suicide case follows an egoistic typology. Since the report confirms no evidence of domestic violence, we may assume that the couple deliberately made a suicide pact – caution is needed to accept such an assumption and thereby we have not included the death of this female in the overall counting. A "suicide pact" is an agreement between two or more individuals to commit suicide together at a given place and time (Rajagopal 2004). Apart from this case, we have also traced one female suicide under egoistic suicide, which was triggered by the weaker collective control over the individual's behaviour (Berk 2006). "Egoistic suicide is necessarily accompanied by a high development of knowledge and reflective intelligence" (Durkheim, [1897] 2005, p.281) and it necessarily "[springs] from excessive individualism" (Durkheim, [1897] 2005, p.209). Since Durkheim's egoistic suicide implies excess of individuation (March 1982), and requires higher intellectual and mental capacities and as women lack in possessing these characteristics, such suicide cannot necessarily reflects women's experiences (Jaworski 2010; Lehmann 1995). Our analysis on female egoistic suicide may contradict Durkheim's standpoint.

We have traced one female case under fatalistic suicide. Then again, according to the Durkheimian principle of fatalistic suicide, women cannot be typically fatalistic as they lack tempers, desires, and emotions (Jaworski 2010); though women's lives may also badly be a fit to his categorisation of fatalistic suicide (Kushner and Sterk 2005). For example, given the heightened exacerbation of intimate partner violence during the COVID-19 pandemic, it is imperative to elucidate some gendering aspects of such suicide (Joiner, Lieberman, Stanley and Reger 2020). The lockdown has spurred family quarrelling and intimate partner violence against women (Rezaie and Schwebel 2020). Due to stress and humiliation from fear of declining masculine dividends such as work and income, men are reportedly exposing their threshold to anger towards women at home (Hamadani *et al.* 2020). It may be hypothesised that emotional threat, fear of being killed, excessive regulation, challenges, and being controlled by men (fatalistic situation) during this heightening period present as suicide risks for women (Rezaie and Schwebel 2020). An example can be seen in China, which is one of the very few countries in the world where females die more by suicide than men. Scholars state that high rates of female suicide in China are broadly triggered by regulative and oppressive family environments (Davies and Neal 2000); therefore, they can be explained as fatalistic suicides.

Of course, we are not debating Durkheim's gender social ontology, but understand that the problematic social circumstances induced by the COVID-19 outbreak might reposition men's and women's social positions, and that they might lose their status and role in the household, workplace, society, and community. Being entrapped by the increased pressure, they may become frustrated (Lindorfer 2007; Rutz and Rihmer 2007) and engage in life-threatening behaviours (Welford & Powell 2014). The induced COVID-19 social conditions provide a platform for these disturbances, uncertainty, and contextual grounds for self-harming behaviour and large numbers of people might lose their immunity to strains of COVID-19 (Goyal *et al.* 2020).

Durkheim apparently maintains a departure from a psychological explanation of suicide, which contextualises it as an individual or private act (Jaworski 2010). Nonetheless, several post-Durkheimian sociologists, including prominent scholars such as Halbwachs (1930), Cavan (1965), Giddnes (1966, 1971), and Taylor (1982), combined sociological and psychological approaches to analyse suicide, and rejected the dividing line between sociological and psychological explanations (Cleary 2019; Khan, Ratele and Dery 2020). Although Durkheim's sociology of suicide is challenged both theoretically and empirically for his over reliance on social forces, it should also be noted that he did not completely overrun psychological understanding of suicide; rather, all his works including *Le Suicide* are socio-psychological (House 1977).

Durkheim said, "We see no objection to calling sociology a variety of psychology, if we

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carefully add that social psychology has its own laws which are not those of individual psychology" (Durkheim [1897] 2005, p.276). Thomas Joiner (2020, p.35), a prominent suicidologist of the recent time, informed that "He (Durkheim) did not deny, however, that individual conditions like mental disorders are relevant to suicide. But he did claim that most such factors are insufficiently general to affect the suicide rate of whole societies, and thus should not be emphasised by sociologists". While untangling Durkheim's social theory on suicide and its influence on people's psychological or mental state, this study may offer an expansion on sociological theory of suicide in the COVID-19 context. Emotion or mental state, understandably, maintains a strong link between individuals' psychological decision-making and the broader social context where they are located (Abrutyn and Mueller 2014). For example, we should not claim that those who have committed and/or attempted suicide suffered from a mental illness without making any connection with the social context induced by the COVID-19 pandemic, and that the causation of mental illness be attributed to the conditions of society.

Strategic intervention responses for suicide

On the other hand, given the fact that suicide is a very complex and multidimensional problem, recognition and knowledge from various approaches not only helps our exploration of the problem, but aids our contribution to appropriate and meaningful intervention strategies (Turecki and Brent 2016). Several renowned international and national suicide prevention agencies such as the International Association for Suicide Prevention (IASP), Suicide Prevention Resource Centre (SPRC), and Life in Mind introduced specific strategies on how to prevent suicidal behaviours during this crisis period. Even though it is not our intention to disregard the importance of promoting mental health supports at this moment, observations confirm that these prescriptions are merely remedied by soothing mental health issues without taking into broader consideration the social factors. Generally, mental health supports an individualistic approach, and receiving such support mostly depends on the desire of the prospective help-seeker. From a sociological standpoint, it is pivotal that policymakers, responsible for managing the current crisis in society, detail and action pragmatic short-term and long-term plans with an all-encompassing social healing approach (e.g., employment retainment, economic stability, law and order maintenance, access to health services, social inclusion of the virus survivors and their families, social protection, family harmony and incentives) might restore the confidence of people and help to reduce the likely risks of suicidal behaviour. Broadly, we need a combination of social and psychological approaches to suicide prevention during this crisis period.

Anomic suicide

For this connection, we suggest specific public health strategic responses against each type of suicide considering the nuisance effect of the COVID-19 pandemic. Although Durkheim ([1897] 2005, p.241) explicitly said, "It is a well-known fact that economic crises have an aggravating effect on the suicidal tendency", although apart from there needs to be consideration that with anomic suicide the economic difficult anomiclends to domestic catastrophe and subsequently it may stands as a critical cause for suicide. COVID-19 is a period of crisis that is being experienced by the majority of the world's population. A serious negative effect of this crisis situation has been realised across the global economy, indicating an escalation of unemployment rates (Kawohl and Nordt 2020). It is well established that there remains a positive relationship between economic crisis and the increased rates of anomic suicides (Brown and Schuman 2020). Similarly, it has been observed that financial crisis, unemployment, and poverty appear to be the most prominent risk factor for suicide during the COVID-19 pandemic (Bhuiyan *et al.* 2020; Mamun and Ullah 2020). One model shows that job losses due to the COVID-19 economic crisis might result in between 2,135 and 9,570 suicides per year globally (Kawohl and Nordt 2020). It must be taken into consideration that immediate reinstallation of regulation might not be possible in any kind of upheaval, yet targeted steps may reduce the fatality. If targeted measures are not initiated to address the economic distress caused by COVID-19, the world may experience more suicide in the coming days (Kavukcu and Akdeniz 2020). While it is difficult to equally address the economic distress of all groups

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of people, specific financial provisions could be more appropriate during the lasting period of COVID-19 for the most distressed people (Mamun and Ullah 2020) by extending financial safety net supports including food, housing, loans, and unemployment supports alongside active labour market programmes (Gunnell *et al.* 2020). Efforts to ameliorate the worst effects of economic vulnerability appear to be protective as these could lower the risks of anomic-type suicides during this crisis period (Devitt 2020; Khan, Ratele and Arendse 2020).

Altruistic suicide

Altruistic suicide is contextualised in the event of insufficient individuation and abnormally excessive form of social integration (Durkheim [1897] 2005). People's action under the form of altruism may be classified as heroism or martyrdom, but they are also suicides (Leenaars 2008). It is perceived that altruistic suicide may bring some material benefits to society (Stack 2004). We understand from the case examples that persons sacrificed their lives for the greater benefits or interests of others, as derived from an excessive state of social integration. Having been integrated into the society, they may promote self-worth and self-efficacy and might be a source of meaningfulness and security. At times, it could be dangerous as well (Abrutyn and Mueller 2016). For example, one recent study confirms that in the event individuals realise the heightened risks of COVID-19, those with a sense of altruism may likely suffer from mental health illnesses, such as increased levels of anxiety and depressive symptoms (Feng *et al.* 2020). COVID-19 has been labelled as a highly stigmatised disease. Suicide risks might be likely to be increased due to stigma towards survivors of COVID-19 and the frontline medical workers (Bhattacharya, Banerjee and Rao 2020; Gunnell *et al.* 2020). The pressure of stigmatisation seems to provoke them to express their altruism for the benefits of those unaffected. Therefore, the public health management must strive to reduce the perceived risks of COVID-19, improve mental health conditions, and decrease the rampant stigmatisation associated with the virus. In particular, regular counselling programmes must be ensured for front-line professionals of the COVID-19 pandemic.

Egoistic suicide

On egoistic suicide, Durkheim (2005, p.209) said, ''As collective force is one of the obstacles best calculated to restrain suicide, its weakening involves a development of suicide". These suicides occur due to a low level of integration into society. The cases that we presented under the egoistic category apparently marked by dearth of social integration and individualism seem to be more prominent than collectivism. In the event of egoistic suicide, individuals primarily think about their own interests and benefits and wilfully keep themselves disintegrated from the social groups around them (Taylor 1982). One way to tackle these suicides in the midst of the COVID-19 episode is to boost the process of social integration. We need to promote actions that would highlight the importance of shared beliefs, social interaction, social relationships, and feelings of social cohesiveness (Berk 2006). Extending community supports for those who are isolated, entrapped, and lonely, alongside promoting interactions between friends and families, could be a useful mechanism during this period (Gunnell *et al.* 2020). Actions must also be directed to make a good balance between egoistic and altruistic forces so that over integration does not cause altruistic suicide and lower integration does not prompt egoistic suicide (Berk 2006).

Fatalistic suicide

Fatalistic suicide, the type least elaborated on by Durkheim, is largely opposite to anomic suicide. In the event of fatalistic suicide, individuals escape from the normative situation (Stack 1979). According to Durkheim ([1897] 2005, p.276), "It is the suicide deriving from excessive regulation, such as that of persons with futures blocked or aspirations choked by oppressive discipline, and persons living under physical or moral despotism". All the cases under this category attest that imposition of necessary but excessive regulations on individuals, such as quarantine or social isolation and social distancing for actual or suspected infection, may spark a hatred reaction among community members and thus promote fatalistic suicide. Brown and Schuman (2020) termed this as the "perfect storm" for suicidal behaviour during the COVID-19 pandemic. Social isolation or quarantine, although necessary, is a well-established critical risk factor

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for suicidal behaviour (McIntyre and Lee 2020). In terms of prevention of suicide from such regulatory means, it is important that specific mental health supports are provided for patients confirmed or suspected as having COVID-19 and people who are in quarantine or social isolation (Mamun and Griffiths 2020). Furthermore, in the event where regulations (concerning quarantine, social distancing, or lockdown) are deemed imperative, it is recommended that measures occur for short durations provided that clear rationale for the regulations and information about protocols be accompanied. Also, it needs to be ensured that there are adequate supplies and effective electronic communication platforms among people to reduce stress and anxiety during the regulatory stage (Brooks *et al.* 2020).

Suicide prevention seems to not be a priority issue for governments and policymakers as a matter of policy intervention (WHO 2014). During this crisis period, it is imperative to make suicide prevention a global goal alongside other measures to tackle the crisis. Our analysis of the suicide cases related to the COVID-19 pandemic is a wake-up call for the utilisation of knowledge under the rubric of Durkheim's sociology of suicide, which is undoubtedly relevant for suicide prevention initiatives (Amitai and Apter 2012).

Limitations

This analysis has several limitations. The contents of the news were only investigated from online newspaper databases, which can never be equated with the reflections availed through direct interviews of the significant others of the deceased or persons who have attempted suicide to make sense of the context of suicide. Newspaper stories on suicide are generally troubled with exaggeration, glamorisation, and report-bias and hardly comply with WHO guidelines on reporting on suicides (Nisa *et al.* 2020).

This study only employed Durkheim's proposition of suicide sociology, which itself is not free from criticism and shortcomings. Several post-Durkheimian sociologists developed compelling and contesting paradigms within the sociology of suicide (Douglas 2015; Fincham *et al.* 2011; Keidel and Atkinson 1979). This case-based analysis, although somehow relevant to every society, is beyond any sort of broader sociological generalisation. Finally, there were obvious possibilities of failing to identify and locate the relevant cases due to the extensive nature of the web search.

Conclusion

It is impossible to know why the persons in this study chose to die by suicide since it is a complex and multifactorial phenomenon (Samaritans 2013). Therefore, this study deters from being conclusive about the exact motivation of the suicidal behaviour drawn from media reports. However, researchers find online newspaper reporting as important sources of making meaning and constructing realities of the motive for suicidal behaviours (Sisask and Värnik 2012). Although disagreement exists over Durkheim's macro-level theory, which predicts individual level motives of suicidal acts (Berk 2006), alternative arguments highlight his theory to have implications for specifying suicidality of individuals through a micro-sociological level analysis (Abrutyn and Mueller 2014; Berk 2006; Rose 2017). From this perspective, we believe our analysis might provide important sociological insights about this crisis.

Historical trends confirm that an infectious pandemic has been responsible for bringing massive human death tolls (van Bavel *et al.* 2020), caused by direct human penetration but also by self-induced harms like suicide. It is no doubt that deaths due to COVID-19 are increasing and bringing about helplessness. We also expect that by employing insights from this paper, concerned authorities might find some practical and beneficial directions to align their suicide prevention activities with short- or long-term social reconstruction activities. If prevention of suicide is not taken as an alarming signpost in line with other social interventions, it may likely affect many individuals disproportionately across societies. Fighting such an extensive global pandemic requires large-scale cooperation and complete subjugation of individual interests to the social interest (van Bavel *et al.* 2020). Let us hope that the fight against COVID-19-induced suicidality will be suppressed through our collective conscience and efforts.

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