

From “The Interpersonal Theory of Suicide” to “The Interpersonal Trust”: an unexpected and effective resource to mitigate economic crisis-related suicide risk in times of Covid-19?

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Abstract. Suicide risk and resilience strategies during the different phases of the COVID-19 pandemic are of great interest to researchers. At the pandemic onset, a dramatic suicides exacerbation was feared. Some authoritative authors warned the scientific and clinical community about this risk by pointing out that especially psychiatric, psychological, and social factors could interact with each other to create a vicious cycle. While worldwide case-reports and studies conducted at emergency departments did indeed find an increase in suicidal behavior, recent systematic reviews, meta-analyses, and time-series analyses could not confirm this for the first COVID-19 wave. Instead, it appears that the increased suicide risk outlasted the acute phase of the pandemic and thus affected people more during the pandemic following phases. One possible reason for this phenomenon may be a persistent state of insecurity regarding the economic crisis evolution with serious financial stressors in terms of income decrease, unemployment, repaying debts difficulty, home loss, one's social status derive, social hierarchy drop, and poverty. During the COVID-19 first wave, with particular regard to vulnerable populations, one of the postulated theories unifying different risk factors under a single frame was the “Interpersonal Theory of Suicide”. Conversely, the “Interpersonal Trust” theory emerged as a protective factor even during an economic crisis. In a possible mirroring of the two theories, it seems to be feasible to find common themes between them and, above all, to gain relevant insights to devise effective prevention and supportive strategies for dealing with suicide risk challenges that COVID-19 will continue to pose in the foreseeable future. (www.actabiomedica.it)

Key words: Suicide, suicidal behavior, suicide attempt, suicidal ideation, COVID-19, Interpersonal Theory of Suicide, Interpersonal Trust, economic crisis, financial stressors, risk factors, protective factors, resilience, mental health

Introduction

The risk of suicide and possible resilience strategies to address this risk during the different phases of the novel Coronavirus 2019 (COVID-19) pandemic is

a topic of great interest to researchers (1-5). While it is well established that the association between traumatic experiences and mental health problems can be mediated by the presence of individual psychological and social strengths that include resilience, coping

strategies, and social network, only a handful of studies have attempted to investigate these different mitigating factors during the different phases of the pandemic (3, 6-9).

From a public health perspective, in order to devise effective preventive and supportive psychosocial interventions, it is therefore pivotal to identify the specific bio-psycho-social factors pertaining to the chronological pandemic's phases that may exacerbate mental health problems, including the suicide risk, as well the different resilience strategies adopted by the general population (1).

While the COVID-19 situation is constantly evolving, as societies pass through a succession of different phases and alternate between periods of lockdown and no-lockdown, a factor that may be critical for the evolution of suicide risk during these different phases is the economic crisis related to COVID-19 and its implications.

The early pandemic and lockdown periods

At the onset of the pandemic and during its early stages, several authors had warned the scientific and clinical communities about a possible exacerbation of suicide risk, pointing out that various factors (especially psychiatric, psychological, and social) could interact to create a vicious cycle (10-13).

Despite many worldwide case reports (e.g., Thakur and Jain (14) for a first gathering of cases published in the press, 15-19) and some studies conducted on patients admitted to emergency departments (ED) and hospital wards (20-23) having found increased suicidal ideation and behavior, recent analyses based on data from the first COVID-19 wave could not confirm these initial findings (5, 24-28). Compared to the pre-pandemic situation, only one meta-analysis published during COVID-19 (29) reported an increase in suicidal ideation (10.81%), suicide attempts (4.68%), and self-harm (9.63%) during the COVID-19 pandemic. Moderation analysis identified younger adults and women as being most susceptible to suicidal ideation (29). Two dynamics have emerged in recent summary analyses: there are higher rates of suicidal behavior in less industrialized countries and lower rates in the more developed parts of the world (22, 24, 25).

Furthermore, in times where internet searches and user behavior on social networks generate large amounts of data (Big Data), several studies have employed Big Data to investigate suicidal ideation during the first and second waves of COVID-19. While some studies examined how online expressions of mental health changed throughout the pandemic, others specifically investigated whether containment measures or increases in COVID-19 cases and deaths were associated with increases in internet searches using mental health related search queries (see 30 and references therein). In a recent review of several international studies that had analyzed Big Data resources from 24 countries, Gianfredi and colleagues (30) found a statistically significant increase throughout the COVID-19 pandemic of internet searches with search terms related to mental health issues, with the most used search terms being fear, stress, solitude, anxiety, depression, and suicide thoughts.

A belated increase in suicide risk?

Contrary to what had originally been postulated (10-13, 31), it seems that the increased suicide risk has outlasted the acute phase of the current pandemic and has affected people more during subsequent phases. McIntyre and colleagues (32) performed a longitudinal analysis of admissions to a psychiatric ED in a cohort of Irish 760 patients during the early and late phases of the initial lockdown. They found a sharp decrease in suicidal behavior during the early months of the lockdown followed by a compensatory increase in subsequent months that peaked as the lockdown measures began to be eased. Similarly, in a multi-centric study conducted in Italian psychiatric EDs, significant increases in both suicidal ideation and suicidal attempts were reported for post-lockdown period (33).

In the "post-COVID-19 syndrome", "long COVID-19", or "post-acute COVID-19" syndrome, persistent psychiatric symptoms observed among COVID-19 survivors, such as depression, anxiety, post-traumatic symptoms, and cognitive impairment, may be related to psychological factors and neurobiological injuries, or to neurologic impairments in which the neural injury overlaps hopelessness (34-36), which can ultimately lead to an increased suicide risk

(37, 38). This risk has also been hypothesized to occur in COVID-19 survivors without post-COVID syndrome (37, 38).

The reason could reside in the persistent state of uncertainty (13, 39), particularly the insecurity regarding the evolution of the economic crisis (39). A recent study (40) comparing data collected during the pandemic to pre-COVID-19 data found that Japanese suicide rates in 2020 increased among men during October and November 2020, while among women the increase occurred between July and November. These authors pointed to economic difficulties as a determinant for suicide risk, especially in women, who were more representative of those who lost their jobs due to the pandemic between July and September (39, 40). A lower income, unemployment, difficulty in repaying debts, loss of home, decline of one's social status, drop in the social hierarchy, and poverty, were reported by the majority of studies as the main financial stressors involved (41-46).

“The Interpersonal Theory of Suicide”

During the COVID-19 first wave, with particular regard to vulnerable populations, one of the postulated theories unifying different risk factors under a single frame was the “Interpersonal Theory of Suicide” (47-50). This theory is based on three main constructs. It posits that desire for suicide, in its most dangerous form, is promoted by a combination of “thwarted belongingness” and “perceived burdensomeness”, the first two constructs, alongside a sense of hopelessness about the possibility of change of these states (47-50). The third construct, “acquired capability for suicide” (acquired through repeated exposure to both mental and physical pain) is considered a necessary prerequisite for action after sensing the desire for suicide (47-50). Groups considered vulnerable are patients with psychiatric and chronic somatic conditions who cannot receive routine healthcare, healthcare professionals who are incessantly exposed to dramatic events, and individuals in precarious conditions (51-59). Additional factors such as social isolation/entrapment/loneliness, increase in alcohol consumption, increase in domestic violence, access to lethal means, stigma, and intensive exposure to stories of hopelessness through

the media, accentuate the already unfavorable state of these populations, fostering the development of the three constructs from the aforementioned theory and creating the proper atmosphere for an increased suicide risk (22, 60-64). Interestingly, neurobiological substrates of suicide in times of social isolation and loneliness have also been elucidated (65).

From a different perspective, the three constructs of the “Interpersonal Theory of Suicide” (47-50) have been used as cues to identify the vulnerabilities targeted by national suicide prevention campaigns during this historical pandemic (39). It has become clear that resilience is formed at both the individual and community level (39, 66). As a result, aspects such as “I'm alone” or “I'm a burden” (47-50) could be buffered if the individual is surrounded by less vulnerable populations to experience a general feeling of solidarity, the ability to share one's difficulties, meet people who are equally overwhelmed by the same circumstances, find strength in family ties as families are being re-united, and encounter mutual support, all of which serving as possible strategies for resilience (39). A large body of literature has been emerging that suggests a possible association between social support and mental health, not only in the context of family but also in the context of more extended social networks (67-70).

“The Interpersonal Trust”

The link between financial stressors and increased suicide risk is not new, as demonstrated by what happened during the Great Depression of 1929 (46). Also during the severe economic crisis of 2008 a significant increase in suicidal behavior was recorded in several countries (41-46) and the term “economic suicides” began to appear in the literature (71). Apart from the recent Japanese study mentioned above (40), all studies dealing with the 2008 economic crisis found that the association between suicidal behavior and financial stressors was more significant in men than in women who appeared as more vulnerable during the actual crisis (28, 39, 40). Moreover, and rather interestingly, the greatest increase in suicidal behavior occurred many months before the worst period of the crisis itself (46, 72, 73). This could also be hypothesized for the near future.

Concerning possible factors that can mitigate the effects of financial stressors on suicidal risk, it has emerged that countries with active labor market programs, sustained welfare, targeted interventions for unemployed people, and good primary and mental health care services had a less marked increase in suicide rates compared to countries without such programs or where funding for these support measures had been cut prior to the pandemic (74, 75). In all these studies, the encouragement to maintain strong family support and foster social relationships/networks were crucial factors to mitigate the associations between unemployment and suicide risk (66, 74-76).

With regard to contrasting the harmful effects of economic hardship on suicide risk during the 2008 economic crisis, the “Interpersonal Trust” played a pivotal role (77). Defined as “a willingness to accept vulnerability or risk based on expectations regarding another person’s behavior” (78) or “the belief that others will not, at worst, knowingly or willingly do you harm, and will, at best, act in your interests” (79), the “Interpersonal Trust” theory has been reported to be relevant to virtually every facet of social functioning and has profound effects on mental and physical health throughout a person’s lifespan and under the most adverse conditions (80). When Economu and colleagues (42, 41) studied the recent economic crisis in Greece, “Interpersonal Trust” emerged as the only significant protective factor with respect to suicidal ideation.

Conclusion

In this article, we have examined how the “Interpersonal Theory of Suicide” and the concept of “Interpersonal Trust” can be used to extract insights regarding the mitigation of suicide risk during a pandemic such as Covid-19.

From a public health perspective, several conclusions can be drawn: (i) at an institutional level: the implementation of active labor market programs, sustained welfare, and targeted interventions for unemployed people have all been shown to be effective a mitigating suicide risk; (ii) at an individual and inter-individual level: fostering family support and

social networks can foster resilience against isolation, loneliness, and suicidal ideation; (iii) during periods of confinement, remote supporting devices (e.g., telepsychiatry or telephone counseling) can be used to provide the general public with continued access to both primary and mental health care services (81); (iv) finally, Big Data can provide valuable insights and information in near real-time regarding the mental health of the general public, including population segments that are often beyond the reach of general health practitioners. By leveraging this information, and especially as the use of Big Data in scientific research and daily healthcare practice is destined to grow (82), it should become possible to devise and plan improved and tailor-made public health strategies (82), including personalized strategies for SI/SB prevention (83). Given the large amount of information that can be extracted from Big Data, exploiting this information may prove extremely useful to inform policymakers and health authorities on the implementation of healthcare services and policies, including the provision of care to those affected by direct and indirect mental health consequences (30).

In a possible mirroring of the “Interpersonal Theory of Suicide” and the “Interpersonal Trust”, it seems possible to find common themes between the two theories and, above all, both theories can be used to gain important insights into the specific approaches of how to devise effective prevention and supportive psychosocial strategies for dealing with suicide risk challenges that COVID-19 will continue to pose for the foreseeable future (Figure. 1).

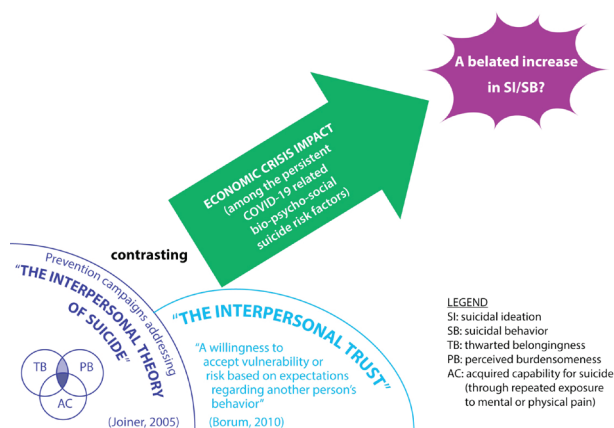


Figure 1.

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