

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. www.elsevier.com/locate/euroneuro





## Can we expect a rise in suicide rates after the Covid-19 pandemic outbreak?



## Maurizio Pompili

Department of Neurosciences, Mental Health and Sensory Organs, Faculty of Medicine and Psychology, Suicide Prevention Centre, Sant'Andrea Hospital, Sapienza University of Rome, Rome, Italy

Received 5 May 2021; received in revised form 15 May 2021; accepted 22 May 2021

## **KEYWORDS**

Suicide; Covid-19, prevention

The unprecedented times due to the coronavirus disease 2019 (Covid-19) pandemic have struck humans worldwide and forced rapid changes that could never possibly be imagined. Unfortunately, the number of deaths due to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and its many effects will be around for years. Both direct and indirect conditions will haunt our lives, at least in the near term.

Suicide, as a multifactorial phenomenon, is significantly influenced by events that destabilize some of the pillars of daily life, such as family bonds, job satisfaction, economic stability, recreational life and well-being, to name just a few. There is no doubt that suicide risk is one of the most tragic of the possible effects of the pandemic. We often refer to mental pain for a phenomenological understanding of the suicidal mind and the pandemic has certainly influenced the degree of sufferance among individuals, posing an additional burden to those already suffering.

At the beginning of the pandemic, the headlines were reporting an association between suicides and Covid-19, sometimes featuring frontline personnel who were at higher risk of suicide, especially at the beginning of this dramatic

E-mail address: maurizio.pompili@uniroma1.it

https://doi.org/10.1016/j.euroneuro.2021.05.011 0924-977X/© 2021 Elsevier B.V. and ECNP. All rights reserved.

event. Then there was news of the pandemic associated with emerging economic difficulties and the consequences of social isolation and loneliness. Furthermore, testing positive for Covid-19 or fear of being infected/infecting a loved one was reported as a higher suicide risk. Lockdown measures forced families to share houses for weeks without interruption, possibly exacerbating existing conflicts. Alongside these impactful events was the traumatic experience of losing loved ones and the impotence with regard to infection and for not ritualize farewells. The literature also rapidly reported that quarantine had exerted a psychological impact on the population, along with a higher number of suicides.

Scholars argued that the pandemic could be the perfect storm for influencing suicides (Reger et al., 2020). The first wave of infection and lockdowns was in Spring, which is notorious for a peak in suicides; there was also the increasing role of economic problems for various commercial sectors that were totally and suddenly blocked. Furthermore, the fear of visiting hospitals could lead to neglect in physical care both for acute and chronic medical diseases. Suicide risk was emphasised by pointing to loneliness and social isolation (including the neurobiological correlates, e.g., Zalsman, 2020) due to social distancing, which was worsened by impairment in attending religious services, (a suicide protective factor). In this array of worries, scholars and stakeholders were also concerned about care restrictions for those with mental disorders.

At the beginning of the pandemic, dedicated researchers in suicide prevention started close consultations to explore the new scenario. A small number of leaders soon turned into an international group named the Covid-19 Suicide Prevention Research Collaboration, which paved the way to what was needed to prevent suicide during the Covid era (Gunnell et al., 2020). At the same time, international institutions dedicated to suicide prevention started acting proactively. There were numerous posts to support various aspects of daily life, especially for individuals in crisis. The focus was also on work in advance for risky conditions such as loneliness, collective anxiety, and making sense of the time during the lockdown. There were webinars and generous contributions from experts in the field. Altogether, these initiatives, in concert with local efforts, represented a particular dedication to the issue of suicide prevention. While preoccupations for a possible increase in suicide rates continued, it emerged that such a proactive approach on multiple sides to monitor and deliver suicide prevention actions constituted an opportunity to mitigate an alarmingly consolidated phenomenon (Moutier, 2020).

However, the picture was still only partial. Sakamoto et al. (2021) found that, compared with previous years, suicide rates in Japan in 2020 increased during October and November for men and throughout July-November for women. These authors pointed to economic difficulties as a determinant for suicide risk, especially in women, who were more represented among those who lost their jobs due to the pandemic through July-September. Results were also published of a comprehensive survey on mental health and well-being in the United Kingdom. O'Connor et al. (2020) found that the rates of suicidal ideation increased during the initial weeks of lockdown, with one in seven (14%) young adults reporting suicidal thoughts in the last week at wave 3 (28 April to 11 May 2020). As the year went by, pressure to produce data on suicide rates worldwide during the pandemic became a priority; and with the advent of 2021, a better picture of the phenomenon emerged.

Leske et al. (2021), using a real-time suicide surveillance system (February-August 2020) in Australia, showed that the Covid-19 pandemic did not affect suspected suicide (probable or 'beyond reasonable doubt' categories of suspected suicides) rates for the first seven months after the Public Health Emergency Declaration in Queensland. Scholars observed that most countries, mainly high-income countries, did not report an increase in suicide rates during the pandemic. Furthermore, a study reporting data on suicides during the Covid-19 pandemic from 21 countries found that rates were unchanged or declined in the early months of the pandemic compared with expected levels (Pirkis et al., 2021).

No doubt, supporting each other was a strong point that emerged from the national campaigns. Families were all united under the same circumstances, meaning that bonds were strengthened. At the same time, some people rediscovered some space for themselves, with less busy daily routines and switching to smart working. Such assets may have allowed more time for sleeping and less work pressure. The individual in crisis probably felt that support was somehow available. Therefore, aspects such as 'I'm alone' or 'I'm a burden', connotating two main features of the interpersonal model to depict suicide risk (Joiner et al., 2009), could have been buffered by a general feeling of solidarity and difficulties in sharing. It became clear that resilience emerged at the individual and community levels (Vinkers et al., 2020). However, the hard work is probably yet to come, as consequences will be more visible in the time ahead, both on the emotional and practical level and from the economic and job perspective. During the pandemic, mental health problems increased, well-being decreased, and loneliness and psychosocial crisis became more common in the general population. Such effects may act on individuals' diathesis conditions, predisposing them to higher suicide risk. Therefore, it is time to continue with the same enthusiasm in suicide prevention that has characterized the first year of the pandemic. Individuals in crisis wish to live, even when thinking about suicide, as long as there is a reduction of their mental pain. Let us work together by caring for such individuals.

## References

- Gunnell, D., Appleby, L., Arensman, E., Hawton, K., John, A., Kapur, N., Khan, M., O'Connor, R.C., Pirkis, J.COVID-19 Suicide Prevention Research Collaboration, 2020. Suicide risk and prevention during the COVID-19 pandemic. Lancet Psychiatry 7 (6), 468-471.
- Joiner, T.E., Van Orden, K.A., Witte, T.K., Rudd, M.D., 2009. The Interpersonal Theory of Suicide: Guidance for Working with Suicidal Clients. American Psychological Association, Washington, DC.
- Leske, S., Kölves, K., Crompton, D., Arensman, E., de Leo, D., 2021. Real-time suicide mortality data from police reports in Queensland, Australia, during the COVID-19 pandemic: an interrupted time-series analysis. Lancet Psychiatry 8 (1), 58-63.
- Moutier, C., 2020. Suicide prevention in the COVID-19 era: transforming threat into opportunity. JAMA Psychiatry doi:10.1001/ jamapsychiatry.2020.3746. (in press).
- O'Connor, R.C., Wetherall, K., Cleare, S., McClelland, H., Melson, A.J., Niedzwiedz, C.L., O'Carroll, R.E., O'Connor, D.B., Platt, S., Scowcroft, E., Watson, B., Zortea, T., Ferguson, E., Robb, K.A., 2020. Mental health and well-being during the COVID-19 pandemic: longitudinal analyses of adults in the UK COVID-19 mental health & wellbeing study. Br. J. Psychiatry 21, 1-8.
- Pirkis, J., John, A., Shin, S., DelPozo-Banos, M., Arya, V., Analuisa-Aguilar, P., et al., 2021. Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries. Lancet Psychiatry (in press).
- Reger, M.A., Stanley, I.H., Joiner, T.E., 2020. Suicide mortality and coronavirus disease 2019: a perfect storm? JAMA Psychiatry doi: 10.1001/jamapsychiatry.2020 (in press).
- Sakamoto, H., Ishikane, M., Ghaznavi, C., Ueda, P., 2021. Assessment of suicide in Japan during the COVID-19 pandemic vs previous years. JAMA Netw. Open 4 (2).
- Vinkers, C.H., van Amelsvoort, T., Bisson, J.I., Branchi, I., Cryan, J.F., Domschke, K., Howes, O.D., Manchia, M., Pinto, L., de Quervain, D., Schmidt, M.V., van der Wee, N.J.A., 2020. Stress resilience during the coronavirus pandemic. Eur. Neuropsychopharmacol. 35, 12-16.
- Zalsman, G., 2020. Neurobiology of suicide in times of social isolation and loneliness. Eur. Neuropsychopharmacol. 40, 1-3.