



## Editorial

### The COVID-19 pandemic: Challenges to prevent suicide in megacities

This 2020 we find ourselves, health professionals, health managers, governments and almost all the community in very unexpected and challenging circumstances as we face the COVID-19 pandemic. Millions of people around the world are infected and more than one million have died so far<sup>1</sup>. The pandemic is presenting many-fold impacts on economy, education and several aspects of our lives. All these impacts added to social distancing, isolation, family and other personal losses and fear of contagion have both activated and intensified mental health problems in many people, being crucial to enhance suicide prevention<sup>2,3</sup>. All geographical areas are vulnerable to the pandemic and its associated impacts. However, megacities, urban agglomerations surpassing 10 million people, are environments at higher risk<sup>4,5</sup>. Megacities are very susceptible to public health crises and are currently facing unprecedented challenges to reduce the spread of COVID-19 and alleviate the impacts of the pandemic<sup>6,7</sup>.

The pandemic in megacities could adversely affect well-recognized suicide risk factors such as increase in psychiatric disorders, unemployment, financial stressors, domestic violence and alcohol and drug abuse<sup>2,3,6,8</sup>. Social isolation and feelings of loneliness are likely to increase during the pandemic and have been considered as risk factors of suicide during previous epidemics<sup>9</sup>. People at higher risk of suicide include individuals with pre-existing psychiatric disorders, with previous suicide attempt, males, female victims of intimate partner violence<sup>6,8,10</sup>, people living in megacities with high prevalence of COVID-19 and individuals who have suffered the loss of relatives or friends<sup>3</sup>. It has been also proposed that the fear and stigma towards persons with COVID-19 may also result in an increase of suicide<sup>11</sup>.

Recent prevalence studies show that the impact of the pandemic has resulted in an increase in anxiety, stress and depression in the general population<sup>12</sup> and especially among healthcare workers<sup>13,14</sup> and people with pre-existing psychiatric disorders<sup>15</sup>. The fear of contagion, isolation, loneliness and physical distancing may exacerbate pre-existing psychiatric disorders and trigger mental health problems in the general population<sup>3,11</sup>. The rise in mental disorders coupled with the already known problem of the mental health treatment gap, representing a challenge to satisfactory address this new demand for mental healthcare. Because of the quarantine, it is also expected that many people with psychiatric disorders discontinue their treatment, increasing their suicide risk. The pandemic is representing a challenge to mental health teams at both primary and speciality care levels; those have needed to reformulate their practices and developing proficiency to deliver remote assessments, consultations and interventions, wherever possible<sup>3,11,16</sup>.

During the coronavirus pandemic, many megacities dwellers are facing the loss of family members and friends, often under very difficult circumstances. Bereavement may be particularly challenging in the circumstances of the current pandemic. COVID-19 deaths are likely to increase factors interfering with grief adaptation<sup>17</sup>. The inability to be with relatives or friends when they die or the restrictions to hold funerals or to have social contact also limits the bereaved of needed social rituals and social support that promote adaptation. Because of the erratic nature of who recovers and who dies, it has been considered a risk factor for grief adaptation the feelings of survivor guilt and rumination or ideas that the death was wrong or unfair<sup>17</sup>.

The impact of the pandemic on unemployment and financial stressors may be especially exacerbated for

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people living in large urban centres. Megacities usually concentrate jobs opportunities and financial hubs in their countries<sup>6</sup> which have been impacted by the current crisis. It is expected that the most impacted will be people already living in poverty, women, informal workers and vulnerable migrant workers. There is evidence that previous economic recessions and their impacts have resulted in an increase in suicide, post-traumatic stress disorder, depression and alcohol and drug abuse<sup>18-21</sup>.

Domestic violence, another well-recognized suicide risk factor, has increased during lockdown. Family tension and conflicts can also be exacerbated if we consider that many megacity residents live in overcrowded households. The lockdown can also increase isolation for women suffering intimate partner violence, limiting their access to social support and local resources that can help and protect them<sup>22</sup>.

One does not know how all the risk factors exposed here had impacted or will impact suicide rates in megacities, but it is expected that the consequences of the pandemic on mental health will be present for a long period of time and can also peak later than the current pandemic<sup>3</sup>. For this reason, we highlight the importance of suicide prevention in the current health agenda. We present here some strategies to address the challenge of suicide prevention in times of COVID-19 pandemic in megacities. Our recommendations have been adapted from recent publications<sup>2,3,11</sup> and guidelines<sup>16,17,23</sup>, as well as we reinforce the endorsement of the World Health Organization and the United Nations<sup>24</sup> of including psychosocial support and mental healthcare into COVID-19 plans and response strategies. We will start presenting recommendations for universal interventions — intended to affect every individual in a population — and, in a second stage, we will suggest selective or targeted interventions for population at higher risk of committing suicide. Because particular vulnerabilities and sociocultural aspects vary between and within megacities<sup>6</sup>, local authorities need to prepare strategies to prevent suicide through a public health plan which considers how to adapt available resources to overcome this challenge.

Universal interventions are required to reduce the economic impact of the pandemic and unemployment. In response to COVID-19, many countries have made modifications to existing anti-poverty cash transfer programmes (CTPs) and have offered emergency aid

to support poorest households<sup>25</sup>. Previous evidence suggests that CTPs can reduce suicide rates<sup>26,27</sup>. Governments should strengthen the provision of emergency aids and deliver active labour market programmes and training in new technologies<sup>3,11</sup>.

Universal interventions are also needed to reduce the access to means to commit suicide. During quarantine, it is possible that some suicide means, such as arms, pesticides/toxic substances and medications, could be more readily accessible in homes. Local authorities should contemplate sales restrictions and other barriers to reduce the access to means to commit suicide<sup>3,8,11</sup>.

The increase of violence against women requires special attention. Preventing intimate partner violence through universal anti-violence campaigns and programmes and enhancing the availability of community services and shelters for women who experience domestic violence during COVID-19 pandemic, are crucial<sup>22</sup>. Some recommendations are to include among the list of essential services all facilities for women experiencing violence and to facilitate rapid evaluations, safety planning and case management<sup>22</sup>. We also suggest to create and strengthen online resources, applications (apps) and helplines.

Local authorities in each megacity must ensure that individuals with mental health disorders and with suicide risk obtain the care that they need. Facilitating the access to mental healthcare and psychosocial support in communities, and enhancing online resources and interventions, including hotlines, can help to prevent suicide<sup>3,11</sup>. Healthcare workers and other community members need to be trained on early detection of mental health disorders, identification of suicidal warning signs and proper management<sup>3,8,11</sup>. During the COVID-19 pandemic, remote consultations (telephone calls, audio and video digital platforms) should be encouraged<sup>16</sup>. It is essential that the staff receive digital training to support alternative ways to provide mental health assessments and treatments. In some cases, digital interventions may be limited, especially for people with limited access to digital technologies or with lack of digital literacy<sup>16</sup>. It is also possible that some individuals may feel insecure about using digital mental healthcare resources. Consultations by telephone may facilitate the continuity of care for those patients who present difficulties to engage with more complex digital interventions<sup>16</sup>.

The early recognition and treatment of depressive, psychotic and alcohol use disorders are fundamental to reduce the risk of suicide<sup>8</sup>. During the pandemic, megacities are facing the challenge of reinforcing their already overburdened healthcare systems to cover the increased demand for mental healthcare and to continue the care for people with pre-existing mental health disorders<sup>3,11</sup>. Patients with pre-existing psychiatric conditions should be counselled to continue their treatment and to remain connected with their families and friends during physical distancing through social media and other available communicational resources<sup>3,11</sup>. The provision of community and family support for patients with psychiatric disorders that live alone can be helpful<sup>8</sup>. Patients with pre-existing psychiatric disorders and their families also require learning to identify warning signs of suicide risk and to be informed about the available health services and hotlines which can be contacted in case of suicidal crises. Mental health services must prepare and develop protocols to conduct remote evaluations and initial interventions for cases with risk of suicide<sup>3,11</sup>. A standard protocol may include to evaluate the risk of suicide, to provide a safety planning intervention (by controlling the access to lethal means and ensuring that interpersonal support is available) and to determine the most safe and appropriate setting for treatment<sup>8</sup>.

Finally, many healthcare professionals in megacities are facing challenging and unprecedented demands to treat patients with COVID-19<sup>23</sup>. The increase of medical demands, the requirement of employing strict biosecurity measures, the risk and fear of contagion, alongside with multiple personal demands, represent sources of stress for these front-line professionals<sup>23</sup>. It has also been reported that some health professionals have been stigmatized as a potential source of contagion, and for this reason, they have been avoided by the community<sup>23</sup>. All these demands require that healthcare systems and health managers reinforce the protection of the mental well-being of healthcare workers. Some measures may include to reinforce health teams, to schedule regular staff meetings to discuss clinical and ethical decisions and to actively evaluate the well-being of healthcare professionals in a confidential environment. Healthcare professionals presenting persistent difficulties to deal with the stress or those presenting with mental health disorders, require to be supported and referred to evidence-based treatments<sup>23</sup>.

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## References

1. World Health Organization. *Weekly operational update on COVID-19*. Available from: [https://www.who.int/docs/default-source/coronaviruse/situation-reports/wou-18-september-2020-cleared.pdf?sfvrsn=be6111c8\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/wou-18-september-2020-cleared.pdf?sfvrsn=be6111c8_2), accessed on September 20, 2020.
2. Pan American Health Organization. *COVID-19 pandemic exacerbates suicide risk factors*. Available from: <https://www.paho.org/en/news/10-9-2020-covid-19-pandemic-exacerbates-suicide-risk-factors>, accessed on September 20, 2020.
3. Gunnell ID, Appleby L, Arensman E, Hawton K, John A, Kapur N, *et al.* Suicide risk and prevention during the COVID-19 pandemic. *Lancet Psychiatry* 2020; 7 : 468-71.
4. United Nations Educational, Scientific and Cultural Organization. *COVID-19 implication on water management in megacities: impacts, reactions and lessons*. Available from: <https://en.unesco.org/news/covid-19-implication-water-megacities>, accessed on September 20, 2020.
5. Bhardwaj G, Esch T, Lall SV, Marconcini M, Soppelsa ME, Wahba S. Cities, crowding, and the coronavirus: Predicting contagion risk hotspots. Available from: <http://documents1.worldbank.org/curated/en/206541587590439082/pdf/Cities-Crowding-and-the-Coronavirus-Predicting-Contagion-Risk-Hotspots.pdf>, accessed on September 20, 2020.
6. Ziebold C, Jaen-Varas D, de Jesus Mari J. Homicide and suicide in megacities. In: Okkels N, Kristiansen CB, Munk-Jørgensen P, editors. *Mental health and illness in the city*. Singapore: Springer Singapore; 2017. p. 133-51.
7. Bell DM, Weisfuse IB, Hernandez-Avila M, Del Rio C, Bustamante X, Rodier G. Pandemic influenza as 21<sup>st</sup> century urban public health crisis. *Emerg Infect Dis* 2009; 15 : 1963-9.
8. Jacobs D, Brewer M. APA practice guideline provides recommendations for assessing and treating patients with suicidal behaviors. *Psychiatr Ann* 2004; 34 : 373-80.
9. Wasserman IM. The impact of epidemic, war, prohibition and media on suicide: United States, 1910-1920. *Suicide Life Threat Behav* 1992; 22 : 240-54.
10. Maselko J, Patel V. Why women attempt suicide: The role of mental illness and social disadvantage in a community cohort study in India. *J Epidemiol Community Health* 2008; 62 : 817-22.

11. Sher L. The impact of the COVID-19 pandemic on suicide rates. *QJM* 2020; *113* : 707-12.
12. Salari N, Hosseini-Far A, Jalali R, Vaisi-Raygani A, Rasoulpoor S, Mohammadi M, Rasoulpoor S, Khaledi-Paveh B. Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: A systematic review and meta-analysis. *Global Health* 2020; *16* : 57.
13. Huang Y, Zhao N. Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry Res* 2020; *288* : 112954.
14. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, *et al.* Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw Open* 2020; *3* : e203976.
15. Hao F, Tan W, Jiang L, Zhang L, Zhao X, Zou Y, *et al.* Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. *Brain Behav Immun* 2020; *87* : 100-6.
16. Royal College of Psychiatrists. *COVID-19: Guidance for clinicians*. Available from: <https://www.rcpsych.ac.uk/about-us/responding-to-covid-19/responding-to-covid-19-guidance-for-clinicians>, accessed on September 22, 2020.
17. American Psychiatric Association. *Considerations for family and other personal losses due to COVID-19-related death*. Available from: <https://www.psychiatry.org/FileLibrary/Psychiatrists/APA-Guidance-Death-Dying-Personal-Bereavement.pdf>, accessed on September 20, 2020.
18. Lopez Bernal JA, Gasparrini A, Artundo CM, McKee M. The effect of the late 2000s financial crisis on suicides in Spain: an interrupted time-series analysis. *Eur J Public Health* 2013; *23* : 732-6.
19. Kondilis E, Giannakopoulos S, Gavana M, Ierodiakonou I, Waitzkin H, Benos A. Economic crisis, restrictive policies, and the population's health and health care: The Greek case. *Am J Public Health* 2013; *103* : 973-9.
20. Wahlbeck K, McDaid D. Actions to alleviate the mental health impact of the economic crisis. *World Psychiatry* 2012; *11* : 139-45.
21. Avendano M, Moustgaard H, Martikainen P. Are some populations resilient to recessions? Economic fluctuations and mortality during a period of economic decline and recovery in Finland. *Eur J Epidemiol* 2017; *32* : 77-85.
22. Mlambo-Ngcuka P. Violence against women and girls: The shadow pandemic. Available from: <https://www.unwomen.org/en/news/stories/2020/4/statement-ed-phumzile-violence-against-women-during-pandemic>, accessed on September 21, 2020.
23. U.S. Department of Veterans Affairs. Managing healthcare workers' stress associated with the COVID-19 virus outbreak. Available from: [https://www.ptsd.va.gov/covid/COVID\\_health\\_care\\_workers.asp](https://www.ptsd.va.gov/covid/COVID_health_care_workers.asp), accessed on September 22, 2020.
24. United Nations *Policy Brief: COVID-19 and the need for action on mental health*. Available from: <https://www.hhri.org/publication/policy-brief-covid-19-and-the-need-for-action-on-mental-health/>, accessed on October 1, 2020.
25. Gentilini U, Almenfi M, Orton I, Dale P. Social protection and jobs responses to COVID-19: A real-time review of country measures. Available from: <https://openknowledge.worldbank.org/handle/10986/33635>, accessed on September 20, 2020.
26. Alves FJO, Machado DB, Barreto ML. Effect of the Brazilian cash transfer programme on suicide rates: A longitudinal analysis of the Brazilian municipalities. *Soc Psychiatry Psychiatr Epidemiol* 2019; *54* : 599-606.
27. Christian C, Hensel L, Roth C. Income shocks and suicides: Causal evidence from Indonesia. *Rev Econ Stat* 2019; *101* : 905-20.