

## VIEWPOINT

## Mental Health Disorders Related to COVID-19-Related Deaths

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Viewpoint pages 1491 and 1495 and Editorial pages 1502 and 1504



Related article page 1562



Supplemental content

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Since February 2020, the coronavirus disease 2019 (COVID-19) pandemic has led to at least 200 000 deaths in the US and 1 million deaths worldwide. These numbers probably underestimate COVID-19 deaths by 50%, with excess cardiovascular, metabolic, and dementia-related deaths likely misclassified COVID-19 deaths.<sup>1</sup> In this issue of *JAMA*, Woolf and colleagues<sup>1</sup> update their previous estimate, suggesting that the number of excess deaths between February and August 2020 attributable to COVID-19 is estimated to be about 225 000.

This devastating pandemic has affected nearly every aspect of daily life. While nations struggle to manage the initial waves of the death and disruption associated with the pandemic, accumulating evidence indicates another “second wave” is building: rising rates of mental health and substance use disorders. This imminent mental health surge will bring further challenges for individuals, families, and communities including increased deaths from suicide and drug overdoses. As with the first COVID-19 wave, the mental health wave will disproportionately affect Black and Hispanic individuals, older adults, lower socioeconomic groups of all races and ethnicities, and health care workers.

This magnitude of death over a short period of time is an international tragedy on a historic scale. Focusing on the US, the number of deaths currently attributable to COVID-19 is nearly 4 times the number killed during the Vietnam War. This interpersonal loss at a massive scale is compounded by societal disruption. The necessary social distancing and quarantine measures implemented as mitigation strategies have significantly amplified emotional turmoil by substantially changing the social fabric by which individuals, families, communities, and nations cope with tragedy. The effect is multidimensional disruption of employment, finances, education, health care, food security, transportation, recreation, cultural and religious practices, and the ability of personal support networks and communities to come together and grieve.

A June 2020 survey from the Centers for Disease Control and Prevention of 5412 US adults found that 40.9% of respondents reported “at least one adverse mental or behavioral health condition,” including depression, anxiety, posttraumatic stress, and substance abuse, with rates that were 3 to 4 times the rates 1 year earlier.<sup>2</sup> Remarkably, 10.7% of respondents reported seriously considering suicide in the last 30 days.<sup>2</sup> The sudden interpersonal loss associated with COVID-19, along with severe social disruption, can easily overwhelm the ways individuals and families cope with bereavement.

Of central concern is the transformation of normal grief and distress into prolonged grief and major depressive disorder and symptoms of posttraumatic stress disorder. Prolonged grief disorder<sup>3</sup> is characterized by at least 6 months of intense longing, preoccupation, or both

with the deceased, emotional pain, loneliness, difficulty reengaging in life, avoidance, feeling life is meaningless, and increased suicide risk. Once established, these conditions can become chronic with additional comorbidities such as substance use disorders. Prolonged grief affects approximately 10% of bereaved individuals,<sup>4</sup> but this is likely an underestimate for grief related to deaths from COVID-19.<sup>5</sup> Further, each COVID-19 death leaves an estimated 9 family members bereaved,<sup>6</sup> which projects to an estimated 2 million bereaved individuals in the US. Thus, the effect of COVID-19 deaths on mental health will be profound. Moreover, the stress and social disruption caused by the pandemic has heightened depression and anxiety globally, and is adversely affecting many individuals with preexisting psychiatric disorders and substance use disorders.

How will the US manage this imminent mental health wave? The US faces monumental challenges. At present, the mental health system is greatly strained, and even a needed infusion of funds would comprise only a partial solution. A possible approach, as depicted in the eFigure in the Supplement, involves 3 distinct and interrelated strategies based on graduated levels of risk. The strategies include screening, mental health risk assessment, and treatment for those at highest risk for prolonged grief and posttraumatic stress. At the beginning of the process are the high numbers of adults and children whose family and friends have died from COVID-19. In usual circumstances, bereavement would result in mental health conditions for only a minority of this group. Accordingly, a public health approach is needed that seeks to restore usual social and community supportive processes for the bereaved and to establish widespread screening protocols in primary care.

A public health/community strategy is critical to protect the health care system from becoming overwhelmed. Such a strategy is founded on the knowledge that recovery from loss is greatly facilitated by social support and the maintenance of individual, family, community, and national cultural and religious traditions regarding death and grieving. Social distancing increases isolation and disrupts these practices, including a chance to say goodbye to the deceased. Similar processes affect children and adolescents who experience sudden losses of a parent or a grandparent to COVID-19. The child’s sense of the world as safe and predictable, and caretakers as a “protective shield,” may be disturbed. Caregivers may be overwhelmed and unable to modulate their children’s fears and sadness. In such contexts of crisis, it is easy to lose sight of the emotional distress experienced by the grieving child. Clinicians can help bereaved families find creative ways to safely honor traditions, memorialize the deceased, and improve social support. Clinicians can also support the bereaved through education about grief and its variable course and by creating an empathic space for bereaved patients to share their

story.<sup>5</sup> Prevention also depends on what is done prior to death. Every effort must be made to support end-of-life care decision-making with family members, educate about COVID-19 to lessen self-blame and survivor guilt, facilitate the process of saying goodbye to the deceased, and find creative ways to build social support. Technology could be leveraged to connect grieving children and adults with their extended family and community. Families and communities must make special effort to reach out to grieving individuals, particularly those who live alone. Public health campaigns and public policy initiatives could be created to support the implementation of these preventive strategies.

After a death occurs, primary care clinicians can use validated screening tools, such as the PTSD Checklist for posttraumatic stress disorder symptoms, the Patient Health Questionnaire 9 for depression symptoms, and the Prolonged Grief 12 questionnaire for prolonged grief symptoms, to proactively identify family members or friends of the deceased person who are at highest risk of developing mental health conditions. For individuals identified at risk for or who have recently acquired mental health disorders, such as prolonged grief disorder, the goal is to deliver evidence-based interventions to return pathological manifestations of bereavement to their normal grief trajectories. Ideally, evidence-guided interventions could be implemented within primary care or community settings, but an additional role for primary care is to identify individuals with highest risk and complexity who are best managed by specialty mental health care such as those with suicidal and violent impulses and high levels of dysfunction.

This strategy can only be successful if training is offered to primary care clinicians and community mental health practitioners about grief and traumatic distress and their variable course. Such training should include the implementation of evidence-based psychosocial interventions and the judicious use of psychiatric medications for those developing mental disorders. Such training should also include the use of assessment tools to identify persons who need specialty mental health care. Further, many mental health clinicians will need training in the treatment of prolonged grief and other

bereavement-related conditions, especially for those patients whose clinical course is complex, risky, and disabling.

Of particular concern are psychological risks for health care workers and other essential workers who are providing care for patients with COVID-19. Health care workers must make challenging decisions such as how to distribute limited resources that may directly affect patient survival, may experience concerns about acquiring infection with severe acute respiratory syndrome coronavirus 2, and may experience anxiety, insomnia, and symptoms of traumatic stress, as well as moral injury, guilt, and shame. Systems must work to support health care workers, including acknowledging these severe challenges; supporting coping with clear and frequent communications from leaders, sufficient rest, peer support, and evidence-based mental health resources; and screening and treatment for those who develop mental health disorders.<sup>7</sup> Supporting the mental health of these and other essential workforce is critical to readiness for managing recurrent waves of the pandemic.

In summary, a second wave of devastation is imminent, attributable to mental health consequences of COVID-19. The magnitude of this second wave is likely to overwhelm the already frayed mental health system, leading to access problems, particularly for the most vulnerable persons. The solution will require increased funding for mental health; widespread screening to identify individuals at highest risk including suicide risk; availability of primary care clinicians and mental health professionals trained to treat those with prolonged grief, depression, traumatic stress, and substance abuse; and a diligent focus on families and communities to creatively restore the approaches by which they have managed tragedy and loss over generations. History has shown that societies recover from such devastation when leaders and members are joined by a shared purpose, acting in a unified way to facilitate recovery. In such societies, there is a shared understanding that its members must care for one another because the loss of one is a loss for all. Above all, this shared understanding must be restored.

#### ARTICLE INFORMATION

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