VIEWPOINT

Suicide Mortality and Coronavirus Disease 2019—A Perfect Storm?

Mark A. Reger, PhD
VA Puget Sound Health Care System, Seattle, Washington; and Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle.

Ian H. Stanley, MS
VA Puget Sound Health Care System, Seattle, Washington; and Department of Psychology, Florida State University, Tallahassee.

Thomas E. Joiner, PhD
Department of Psychology, Florida State University, Tallahassee.

Corresponding Author: Mark A. Reger, PhD, VA Puget Sound Health Care System, 1660 S Columbian Way (S-116), Seattle, WA 98108 (mark.reger@va.gov).

Suicide rates have been rising in the US over the last 2 decades. The latest data available (2018) show the highest age-adjusted suicide rate in the US since 1941.[1] It is within this context that coronavirus disease 2019 (COVID-19) struck the US. Concerning disease models have led to historic and unprecedented public health actions to curb the spread of the virus. Remarkable social distancing interventions have been implemented to fundamentally reduce human contact. While these steps are expected to reduce the rate of new infections, the potential for adverse outcomes on suicide risk is high. Actions could be taken to mitigate potential unintended consequences on suicide prevention efforts, which also represent a national public health priority.

COVID-19 Public Health Interventions and Suicide Risk

Secondary consequences of social distancing may increase the risk of suicide. It is important to consider changes in a variety of economic, psychosocial, and health-associated risk factors.

Economic Stress

There are fears that the combination of canceled public events, closed businesses, and shelter-in-place strategies will lead to a recession. Economic downturns are usually associated with higher suicide rates compared with periods of relative prosperity.[2] Since the COVID-19 crisis, businesses have faced adversity and laying off employees. Schools have been closed for indeterminable periods, forcing some parents and guardians to take time off work. The stock market has experienced historic drops, resulting in significant changes in retirement funds. Existing research suggests that sustained economic stress could be associated with higher US suicide rates in the future.

Social Isolation

Leading theories of suicide emphasize the key role that social connections play in suicide prevention. Individuals experiencing suicidal ideation may lack connections to other people and often disconnect from others as suicide risk rises.[3] Suicidal thoughts and behaviors are associated with social isolation and loneliness.[3] Therefore, from a suicide prevention perspective, it is concerning that the most critical public health strategy for the COVID-19 crisis is social distancing. Furthermore, family and friends remain isolated from individuals who are hospitalized, even when their deaths are imminent. To the extent that these strategies increase social isolation and loneliness, they may increase suicide risk.

Decreased Access to Community and Religious Support

Many Americans attend various community or religious activities. Weekly attendance at religious services has been associated with a 5-fold lower suicide rate compared with those who do not attend.[4] The effects of closing churches and community centers may further contribute to social isolation and hence suicide.

Barriers to Mental Health Treatment

Health care facilities are adding COVID-19 screening questions at entry points. At some facilities, children and other family members (without an appointment) are not permitted entry. Such actions may create barriers to mental health treatment (eg, canceled appointments associated with child restrictions while school is canceled). Information in the media may also imply that mental health services are not prioritized at this time (eg, portrayals of overwhelmed health care settings, canceled elective surgeries). Moreover, overcrowded emergency departments may negatively affect services for survivors of suicide attempts. Reduced access to mental health care could negatively affect patients with suicidal ideation.

Illness and Medical Problems

Exacerbated physical health problems could increase risk for some patients, especially among older adults, in whom health problems are associated with suicide. One patient illustrated the psychological toll of COVID-19 symptoms when he told his clinician, "'I feel like (you) sent me home to die."[5]

Outcomes of National Anxiety

It is possible that the 24/7 news coverage of these unprecedented events could serve as an additional stressor, especially for individuals with preexisting mental health problems. The outcomes of national anxiety on an individual's depression, anxiety, and substance use deserve additional study.

Health Care Professional Suicide Rates

Many studies document elevated suicide rates among medical professionals.[6] This at-risk group is now serving in the front lines of the battle against COVID-19. A national discussion is emerging about health care workers' concerns about infection, exposure of family members, sick colleagues, shortages of necessary personal protective equipment, overwhelmed facilities, and work stress. This special population deserves support and prevention services.

Firearm Sales

Many news outlets have reported a surge in US gun sales as COVID-19 advances. Firearms are the most common

© 2020 American Medical Association. All rights reserved.

Downloaded From: https://jamanetwork.com/ by Henrique Sousa on 04/10/2020

method of suicide in the US, and firearm ownership or access and unsafe storage are associated with elevated suicide risk.[7] In this context, issues of firearm safety for suicide prevention are increasingly relevant.

Seasonal Variation in Rates

In the northern hemisphere, suicide rates tend to peak in the late spring and early summer. The fact that this will probably coincide with peak COVID-19 prevention efforts is concerning and deserves additional study.

Suicide Prevention Opportunities

Despite challenges, there are opportunities to improve suicide prevention efforts in this unique time. Maintenance of some existing efforts is also possible.

Physical Distance, Not Social Distance

Despite its name, social distancing requires physical space between people, not social distance. Efforts can be made to stay connected and maintain meaningful relationships by telephone or video, especially among individuals with substantial risk factors for suicide. Social media solutions can be explored to facilitate these goals.

Tele–Mental Health

There is national momentum to increase the use of telehealth in response to COVID-19. Unfortunately, tele–mental health treatments for individuals with suicidal ideation have lagged far behind the telehealth field. Opportunities to increase the use of evidence-based treatments for individuals with suicidal thoughts have been noted for years, especially in rural settings, but fear of adverse events and lawsuits have paralyzed the field. Disparities in computer and high-speed internet access must also be addressed. Research, culture change, and potentially even legislative protections are needed to facilitate delivery of suicide prevention treatments to individuals who will otherwise receive nothing.

Increase Access to Mental Health Care

As COVID-19 precautions develop in health care settings, it is essential to consider the management of individuals with mental health crises. Screening and prevention procedures for COVID-19 that might reduce access to care (eg, canceled appointments, sending patients home) could include screening for mental health crises; clinical staff would be needed to some degree in settings that may currently relegate COVID-19 symptom screening to administrative staff. Also, rather than sending a patient with a child home, alternative treatment settings could be considered (eg, a private space outside).

Distance-Based Suicide Prevention

There are evidence-based suicide prevention interventions that were designed to be delivered remotely. For example, some brief contact interventions (telephone-based outreach)[8] and the Caring Letters intervention (in which letters are sent through the mail)[9] have reduced suicide rates in randomized clinical trials. Follow-up contact may be especially important for individuals who are positive for COVID-19 and have suicide risk factors.

Media Reporting

Because of suicide contagion, media reports on this topic should follow reporting guidelines and include the National Suicide Prevention Lifeline (1-800-273-TALK). The hotline remains open.

Optimistic Considerations

There may be a silver lining to the current situation. Suicide rates have declined in the period after past national disasters (eg, the September 11, 2001, terrorist attacks). One hypothesis is the so-called pulling-together effect, whereby individuals undergoing a shared experience might support one another, thus strengthening social connectedness. Recent advancements in technology (eg, video conferencing) might facilitate pulling together. Epidemics and pandemics may also alter one's views on health and mortality, making life more precious, death more fearsome, and suicide less likely.

Conclusions

Concerns about negative secondary outcomes of COVID-19 prevention efforts should not be taken to imply that these public health actions should not be taken. However, implementation should include a comprehensive approach that considers multiple US public health priorities, including suicide prevention. There are opportunities to enhance suicide prevention services during this crisis.

ARTICLE INFORMATION

Published Online: April 10, 2020. doi:10.1001/jamapsychiatry.2020.1060

Conflict of Interest Disclosures: None reported.

Disclaimer: The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or University of Washington.

REFERENCES

1. Drapeau CW, McIntosh JL. U.S.A. suicide: 2018 official final data. Published 2020. Accessed April 1, 2020. https://suicidology.org/wp-content/uploads/2020/02/2018datapgsv2_Final.pdf

2. Oyesanya M, Lopez-Morinigo J, Dutta R. Systematic review of suicide in economic recession. *World J Psychiatry*. 2015;5(2):243-254. doi:10.5498/wjp.v5.i2.243

3. Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner TE Jr. The interpersonal theory of suicide. *Psychol Rev*. 2010;117(2):575-600. doi:10.1037/a0018697

4. VanderWeele TJ, Li S, Tsai AC, Kawachi I. Association between religious service attendance and lower suicide rates among US women. *JAMA Psychiatry*. 2016;73(8):845-851. doi:10.1001/jamapsychiatry.2016.1243

5. CBS News. Coronavirus patients describe symptoms. Published 2020. Accessed March 19, 2020. https://www.cbsnews.com/news/coronavirus-symptoms-fever-dry-cough-shortness-of-breath/

6. Dutheil F, Aubert C, Pereira B, et al. Suicide among physicians and health-care workers. *PLoS One*. 2019;14(12):e0226361. doi:10.1371/journal.pone.0226361

7. Mann JJ, Michel CA. Prevention of firearm suicide in the United States. *Am J Psychiatry*. 2016;173(10):969-979. doi:10.1176/appi.ajp.2016.16010069

8. Fleischmann A, Bertolote JM, Wasserman D, et al. Effectiveness of brief intervention and contact for suicide attempters. *Bull World Health Organ*. 2008;86(9):703-709. doi:10.2471/BLT.07.046995

9. Motto JA, Bostrom AG. A randomized controlled trial of postcrisis suicide prevention. *Psychiatr Serv*. 2001;52(6):828-833. doi:10.1176/appi.ps.52.6.828

© 2020 American Medical Association. All rights reserved.

Downloaded From: https://jamanetwork.com/ by Henrique Sousa on 04/10/2020