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Letter to the editor: COVID-19; an opportunity to study mental health at the individual and population levels



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Global scientific efforts are focused on COVID-19. Clinicians across the world are expanding their knowledge regarding care of infected patients, and scientists are designing vaccinations and treatments. As our knowledge of the pathophysiology of COVID-19 is rapidly expanding, questions about the mental health effects of the disease are equally critical. In this editorial we focus on the importance of ongoing exploration of these mental health effects of COVID-19, both at the level of the individual patient and population health.

COVID-19 poses mental health risks to a range of vulnerable groups including those with active infection and those at higher risk of exposure such as healthcare workers. Studies following the 2003 SARS epidemic identified that individuals who were infected experienced significantly higher stress levels than healthy controls and healthcare workers with SARS even more so compared to other patients (Chua et al., 2004). A study showed that a quarter of the individuals who recovered from SARS infections had PTSD, and almost one sixth had depressive disorders years after SARS (Mak et al., 2009). During SARS, quarantined healthcare workers experienced fear, fueled by caregiver fatigue and stigma (Maunder et al., 2003), and were at higher risk for Acute Stress Disorder (Bai et al., 2004).

The social realities that the pandemic imposes also create a risk to patients with preexisting mental health conditions. We learned early in the COVID-19 pandemic that individuals with underlying cardiopulmonary and other medical comorbidities are at risk for increased morbidity and mortality (Shi et al., 2020). In contrast, little is known about acute and chronic risks associated with psychiatric comorbidities in the context of social distancing and “shelter-in-place” with the additional impact on access to care (Mak et al., 2010). Information regarding the intersection of mental illness and the social context of COVID-19 is critical to healthcare interventions and policy development.

A range of mental health morbidity occurs also within individual physiologic responses to the COVID-19 virus. Initial studies from Wuhan showed that one fifth of the individuals who died from SARS-CoV-2 had encephalopathy (Chen et al., 2020), possibly mediated by cytokine release in response to infection (Trojer et al., 2020). There are published reports of ICU delirium with COVID-19 (Kotfis et al., 2020),

introducing concern for long-term complications such as depression, anxiety, and PTSD (Marra et al., 2017). This highlights the importance of attention to the long-term mental health sequelae for the patients who survive the ICU.

The secondary effects of the pandemic introduce additional challenges. Financial ramifications of job loss and work schedule changes may negatively impact mental health. “Essential workers” have the stress of increased exposure. Children at risk for abuse have fewer safety nets for protection in the absence of school based services (Campbell, 2020). Preliminary data demonstrate racial and ethnic health outcome disparities in the current pandemic (Khunti et al., 2020). Considering these disparities and how they relate to mental health outcomes will also be crucial.

Assessing mental health consequences and their potential treatments may identify opportunities for improved access to psychiatric interventions in the post-pandemic future. As health care systems are rapidly adopting telehealth in an effort to provide care while minimizing risk of exposure to COVID-19 (Hollander and Carr, 2020), we have an opportunity to assess telehealth's benefits for managing the ongoing needs of psychiatric patient populations. Early findings show that the already existing gaps in access to care in rural America persist with limited broadband access and reimbursement issues in these areas (Lee et al., 2020). Third party reimbursement for telehealth is increasing with the need for social distancing while still providing necessary health care. Health care systems have the potential to expand access through use of technology.

The conversation on mental health has already begun. Columnists draw attention to the negative effects of social isolation, and news sources collect survey data on respondent's mental health status (Brooks, 2020). Researchers are reviewing the impact of quarantine on mental health (Brooks et al., 2020), discussing psychological interventions in China (Duan and Zhu, 2020), and assessing potential strategies to mitigate COVID-19-provoked anxiety (Zheng et al., 2020). Corporations are seeking online mental health counseling for their employees, and universities are offering these resources to communities. Despite these efforts, we acknowledge the need for continued research and better definition of mental health consequences of COVID-19.

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The pandemic's effects are pervasive and far-reaching. It is becoming clear that the consequences of COVID-19 go beyond the infection, and they highlight the biopsychosocial framing of illness on a global scale, including the secondary effects of the infection on mental health. With this in mind, studying the mental health ramifications of the COVID-19 pandemic should challenge us to examine the artificial dichotomy between physical and mental health. Notably, previous experience demonstrates that psychiatric consequences of global events and appropriate care for these consequences are influenced by culture. The scale of the pandemic and its reach across most of the world may afford a better understanding of how culture interfaces with mental illness. We may improve our understanding of how mental and physical health relate to one another in ways not previously recognized or acknowledged.

We find ourselves in a uniquely challenging time for our global society. The infection is not only manifesting neuropsychiatric effects but is also altering our cultural behavior, forcing us into a new way of life. The pandemic affects every aspect of our lives in ways that we do not yet fully grasp. The onus falls on us to describe these footprints and learn from them.

We have an unprecedented opportunity to document and evaluate novel interventions for improving mental health. It is crucial for mental health to be incorporated into assessment of patient outcomes as well as into review of public health consequences. Only by matching the pace of change can we aspire to address mental health issues for all.

Declaration of competing interest

Authors declare that they have no conflicts of interest.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jpsychires.2020.05.032>.

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