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Debate: The toll of the COVID-19 pandemic on children's risk for suicidal thoughts and behaviors

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The COVID-19 pandemic has resulted in more than 128 million cases and 2.8 million deaths throughout the world. There has been a lot of concerns about the potential increase in suicide rates worldwide following the COVID-19 pandemic due to stressors related to the mitigation strategies to reduce the transmission of the virus. In addition, economic stress and unemployment, social isolation, barriers to mental health care, increase in interpersonal conflict, increase in alcohol and gun sales (in the US), and reduced access to community and religious support that resulted from the pandemic are all risk factors that could increase risk for suicide. Recent financial crisis and unemployment rates during the COVID-19 pandemic have reached record high and are expected to continue to be elevated for the next few years.

Early and preliminary reports do not yet show an increase in overall suicide rates but rather a decrease was observed in Japan early during the pandemic, which was followed by later increases starting August 2020 (Ueda, Nordström, & Matsubayashi, 2020). However, these data are still preliminary and do not cover the full period of the pandemic. Prior studies have shown increased suicide rates following the flu pandemics of 1889 and 1918; however, these studies had several methodological limitations. Suicide rates increased among older adults in the year following the SARS epidemic in Hong Kong, which did not return to pre-epidemic rates (Kahil et al., 2021). There is limited evidence on whether suicide rates are increasing in response to the pandemic in children and adolescents. In a study in Japan, suicide rates did not increase in children and adolescents following the first wave of the COVID-19 pandemic (Isumi, Doi, Yamaoka, Takahashi, & Fujiwara, 2020). Self-harm was found to be reduced in primary care settings among individuals 10 years of age and older due to the limited access to mental health care. Thus, the unintentional consequences of the mitigation strategies resulted in limited access to care, which could result in subsequent increased severity of illness following the pandemic (Carr et al., 2021). In a study examining electronic health records from a pediatric emergency department in the United States, suicidal ideation and attempt were found to be elevated in months that corresponded to period of time when COVID-19-related stressors and response to the pandemic were heightened (Hill et al., 2021).

Several studies using online surveys have reported increased rates for moderate to severe psychiatric symptoms, disorders, and suicidal thoughts and behaviors (STBs) in the general population since the COVID-19 pandemic and in children and adolescents, all of which carry an increased risk of STBs. We found high rates of a range of psychiatric symptoms including STBs and prolonged grief among adolescents with rates ranging between 38% and 69% during the first wave of the pandemic (Murata et al., 2021). However, these studies are limited in their representativeness of the general population. School closure, increased time spent at home and online, exposure to media related to the pandemic, exposure to domestic violence and childhood abuse, disruptions in sleep, and limited physical activity have all increased and are risk factors that could increase risk for psychiatric symptoms, disorders, and suicidal thoughts and behaviors (STBs). We found loneliness to be a common predictor across a range of psychiatric symptoms and higher number of hours spent on social media and exposure to media about COVID-19 predicted depression symptoms and STBs in adolescents.

In addition to the impact of the pandemic-related stressors directly affecting children and adolescents, an estimated 40,000 children have lost a parent due to COVID-19 in the United States and the number is far larger worldwide. Parental death due to COVID-19 disproportionately affected Black children who lost parents at a higher rate during the pandemic. Socioeconomic disadvantage is associated with greater COVID-19 hospitalizations and deaths. We and others have shown the increased risk of depression, PTSD, prolonged grief, STBs, and functional impairment in children and adolescents following parental death, which were found to be long-lasting into young adulthood.

Many children are living with parents who survived COVID-19 and are at risk for suicide. In a Danish registry study of 7,221,578 individuals, hospitalizations for infections were shown to be associated with increased risk for death by suicide (Lund-Sorensen et al., 2016). The parent is also at risk to develop neuropsychiatric disorders. In a recent study of COVID-19 patients followed in EHR of 62 healthcare organizations, 33.6% received a neurological or psychiatric diagnosis within 6 months of COVID-19 infection and 12.8% received their first such diagnosis (Taquet, Geddes, Husain, Luciano, & Harrison, 2021). In addition, there is increased risk for STBs among people severely affected by infection. Children living with a parent with mental illness are also at increased risk to develop psychiatric disorders and STBs.

The toll of morbidity and mortality from the COVID-19 pandemic on children and families and the society at

large is still ongoing. While vaccination efforts are providing a glimpse of hope toward the end of the pandemic, we need to be prepared for the potential long-lasting consequences of this pandemic on mental health and risk for STBs in children and adults. Mental health professionals and pediatric primary care settings need to screen for psychiatric symptoms and STBs and monitor those at high risk. They also need to pay particular attention to those who were most affected by the pandemic due to poverty, racial disparities, parental morbidity and mortality, and other psychosocial determinants that put them at increased risk for COVID-19 and its dire consequences in order to reduce the burden on these children and families.

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