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Trends in Psychiatric Emergency Department Visits due to Suicidal Ideation and Suicide Attempts During the COVID-19 Pandemic in Madrid, Spain

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Recent reports indicate that the current coronavirus disease 2019 (COVID-19) pandemic is generating substantial increases in the global burden of depression, anxiety, and acute stress disorders.^{1,2} Potential explanations include fear of contagion, grief for the death of loved ones, social isolation due to confinement measures, and stress due to negative economic consequences in both the short and long terms, among others. One major concern is that this unprecedented health and social crisis will also bring about an increase in the incidence of suicidal behaviors.²⁻⁴

The emergency department (ED) is paramount for suicide prevention efforts: most suicidal crises and suicide attempts are evaluated and treated in the ED. Moreover, as up to 50% of suicidal patients experience barriers to follow-up care and disengage from outpatient mental health services,⁵ the ED often constitutes the only window of opportunity for individual-level suicide prevention.

Methods

We assessed the impact of the COVID-19 outbreak on trends in weekly all-cause psychiatric ED visits and ED visits due to suicidal ideation or suicide attempt (defined as any self-injurious act with at least some intent to die), using triage data from the electronic health care records of a major general hospital in Madrid, Spain (one of the global epicenters of the pandemic), between November 2018 and April 2020. We conducted an interrupted time-series analysis and compared trends before and after the day of the first confirmed COVID-19 case at the ED. Our models used an AR(1) correlation matrix to account for autocorrelated data, and we added robust standard errors. All analyses were conducted using the *itsa* command with the *prais* option in Stata v.15 for PC (College Station, Texas; StataCorp; 2017).

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Results

Figure 1 represents the weekly counts of suicide-related and all-cause psychiatric emergency visits, as well as weekly counts of COVID-19 confirmed cases, reported by the ED over the study period. According to our interrupted time-series analysis, every week after the first confirmed case of COVID-19 there were fewer suicide-related ED visits ($\beta = -1.73$; 95% confidence interval [CI] = $-0.90, -2.56$) and fewer all-cause psychiatric ED visits ($\beta = -4.68$; 95% CI = $-3.52, -5.83$).

Discussion

These data suggest that suicide-related ED visits have decreased in Madrid, Spain, during the COVID-19 outbreak. We believe that 2 potential explanations could be considered: (1) there has been a real reduction in suicidal ideation and suicide attempts, or (2) suicidal ideation and suicide attempts have remained unchanged or increased, but patients are not presenting to the ED during suicidal crises. Given that all-cause psychiatric emergencies have also decreased even though most scientific reports indicate that the burden of mental disorders is probably on the rise,¹ the second possibility seems more likely. In fact, suicide risk reportedly increased during the 2003 severe acute respiratory syndrome (SARS) epidemic.⁶

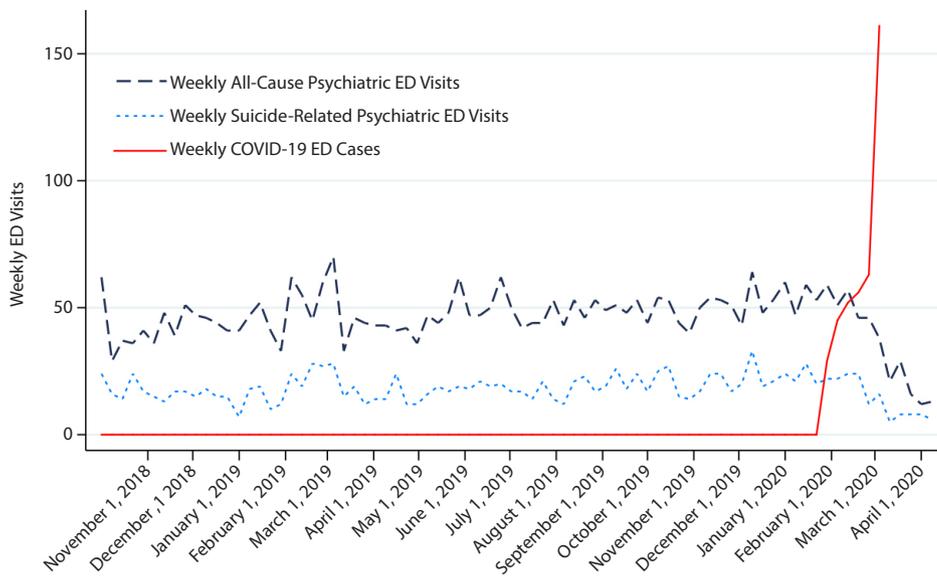
Regardless of the specific reasons underlying patients' avoidance of the ED during suicidal crises (fear of contagion, lockdown measures, etc), this phenomenon poses a major public health challenge in terms of access to care, especially as a large proportion of suicidal patients receive prevention interventions only during ED visits. Psychiatry departments should place strong emphasis on monitoring patients' access to emergency care and implementing alternative outreach strategies. For instance, repeated telephone contacts can lower suicide risk because they reduce the sense of social isolation, enhance adherence to treatment, and allow for repeated assessments of immediate suicide risk.⁷ Also, several evidence-based suicide prevention strategies such as the Safety Planning Intervention⁸ can be performed on the telephone. The effect of the COVID-19 pandemic on health care systems will be far-reaching and long-lasting, and it is imperative to develop and scale-up strategies that minimize its impact on mental health and suicide risk.

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Figure 1. Weekly All-Cause Psychiatric ED Visits, Weekly Suicide-Related Psychiatric ED Visits, and Weekly COVID-19 Cases Reported at the ED Between November 2018 and April 2020^a



^aFollowing the first confirmed case of COVID-19 (January 20, 2020), every week there were fewer all-cause psychiatric ED visits: β (95% CI) = -4.68 (-3.52 to -5.83) and fewer suicide-related ED visits: β (95% CI) = -1.73 (-0.90 to -2.56).

Abbreviation: ED = emergency department.

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