## It is illegal to post this copyrighted PDF on any website. Analysis of Psychiatry-Related Search Engine Trends

## During the COVID-19 Pandemic in India

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mid the coronavirus 2019 (COVID-19) pandemic, psychiatrists face the challenge of providing care while adhering to guidelines established by the public health experts to reduce transmission of the infection. In response to the pandemic, most of the government and private psychiatry outpatient services were closed across India. Government authorities also recommended telepsychiatry services to reduce nonessential in-person visits and also issued permission to establish teleconsultation services across the country. Although there is a growing concern regarding the impact of the pandemic and related lockdown on mental health, little is known regarding how the psychiatric needs of patients have evolved during the lockdown period in India, which started on March 24, 2020. The objective of this study is to use the Google Trends search volume index (SVI), a normalized value from 0 to 100, to understand the changes in patient interest in psychiatric search terms during lockdown in India.

Google Trends SVI data have previously been shown to describe patient interest in psychiatric issues.  $^{2-4}$  We used 3 common search queries: *depression, anxiety,* and *suicide.* The primary outcome was the mean SVI during 2 time intervals: prelockdown period (January 26, 2020–March 22, 2020) and the lockdown period (March 29, 2020–May 24, 2020). The difference in Google Trends SVI data was analyzed using t tests in SPSS version 21 (SPSS Inc, Armonk, New York).

A significant increase in SVI was seen between the prelockdown period and the lockdown period for all 3 psychiatric search queries: depression (63.4 vs 77.4, P<.001), anxiety (53.6 vs 69.9, P<.0001), and suicide (56.2 vs 79.2, P<.001) (Table 1, Figure 1).

Our findings suggest that public interest in psychiatric conditions in India has been significantly influenced by the events during the pandemic, especially the nationwide lockdown. There was a significant rise in online searches for

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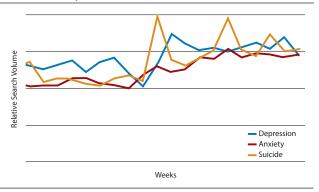
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Table 1. Comparison of Mean Search Volume Indices of the Psychiatry Search Terms *Depression, Anxiety,* and *Suicide* at Key Time Intervals During the COVID-19 Pandemic

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	January 26, 2020-	March 29, 2020-	
	March 22, 2020	May 24, 2020	
	Mean (SD)	Mean (SD)	P Value <sup>a</sup>
Depression	63.4 (5.3)	77.4 (5.9)	<.001
Anxiety	53.6 (3.1)	69.9 (4.4)	< .0001
Suicide	56.2 (4.2)	79.2 (12.9)	< .001

<sup>&</sup>lt;sup>a</sup>Mean search volume indices from the prelockdown period were compared to the lockdown period using t tests.

Figure 1. Mean Search Volume Indices of the Psychiatry Search Terms *Depression, Anxiety*, and *Suicide* From January 26, 2020 to May 24, 2020



the psychiatric search terms *depression*, *anxiety*, and *suicide* during the lockdown period. It is possible that an increase in Google searches for psychiatric conditions such as depressive and anxiety disorders was an indication of increased need for psychiatric consultation during the lockdown, which was not possible at that time due to the closure of psychiatric clinics. However, the higher online interest in those search terms also indicates the probability that many patients in need might have utilized online telepsychiatry services in India, which carry positive clinical and policy implications.

Internet search data like Google Trends may provide valuable insights into patterns of psychiatric disorders and population behavior during the COVID-19 pandemic. However, future well-conducted researches are needed to understand the implications of SVI in predicting patient behaviors, especially with regard to seeking help from mental health care professionals. Our study results suggest that there was a significant increase in interest in mental health conditions in India during the COVID-19 pandemic and that telepsychiatric services can play a significant role in mitigating the mental health crisis.

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