Public Interest in Psychiatric Treatments During COVID-19 Pandemic: An Analysis of Changes Between 2020 and 2021

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The data from internet searches have been worldwide used to analyze the public interest and the impact of coronavirus disease-2019 (COVID-19) pandemic on different types of medical treatments (e.g., dermatological, neurosurgical, etc.). In the field of psychiatry, the impact of this pandemic has been evidenced by the variations in internet searches on mental health topics associated with the increase in cases and deaths from COVID-19 and to the implementation of governmental control measures.[1,2] These studies have focused on examining web searches on different psychopathological processes (such as anxiety, insomnia, depression, stress, suicide, etc.),[1,2] while internet searches in other mental health topics (as psychiatric interventions) has been largely unexplored.[2] Considering this research need, the objective of this study was to analyze the worldwide variation in the volume of internet searches for terms related to different categories of psychiatric treatments in the first two years of the pandemic (2020−2021).

The web search trends on different psychiatric treatment categories were identified using Google Trends tool.[3] This resource provides a relative search volume index (RSV) for different keywords in a specified time period and geographic area. The RSV ranges from 0 to 100, with 100 being the score indicating the highest search volume for a specific category and time period. The RSV data were retrieved for different terms related to several psychiatric treatment typologies: "psychotherapy," "antidepressant," "antipsychotic," and "anxiolytic" during the period from March 9, 2020 to December 26, 2021. The searches were conducted worldwide (using terms

written in English) in all categories of web queries (health, science, news, etc.). The RSV indexes obtained for the periods 2020−2021 were compared using Student's t-test, complementing these analyses with measures of effect size (Cohen's d) and with the determination of the percentage of change experienced in the average RSV between 2020 and 2021. The statistical software Jamovi (2.3 version; https://www.jamovi.org/download.html) was used to perform the indicated analyses.

In the period included in this study (2020−2021) the term "psychotherapy" showed the highest RSV rates (mean=83.7), followed by the terms "antidepressant" (mean=66.3), "antipsychotic" (mean=31.1), and "anxiolytic" (mean=8.27). As can be seen in Figure 1, in 2021 the mean volume of internet searches on topics related to the terms "antidepressant" and "antipsychotic" increased significantly compared to 2020, while the number of web searches on anxiolytics and psychotherapy remained stable between 2020 and 2021.

Psychotherapy is the mental health treatment related topic of greatest public interest on internet globally, during the first two years of the COVID-19 pandemic. Furthermore, the results also show that there is an increase in the public interest on antidepressants and antipsychotics after the first year of pandemic.

Our findings are in line with previous studies showing an impact of the pandemic on the increase of web searches on specific psychopathological processes.[1,2] These could indicate, on the one hand, a major public interest in psychotherapy over pharmacological psychiatric interventions during the period examined. On the other hand, the greater interest in antidepressants and antipsychotics after the first year of pandemic could reflect an increase in the number of people who need information about these treatments because they are interested in them or because they are experiencing psychiatric problems (as nonaffective psychotic disorders, depressive and anxiety disorders, or recent-onset psychosis)[4,5] that require an approach using these psychotropic drugs. Al-
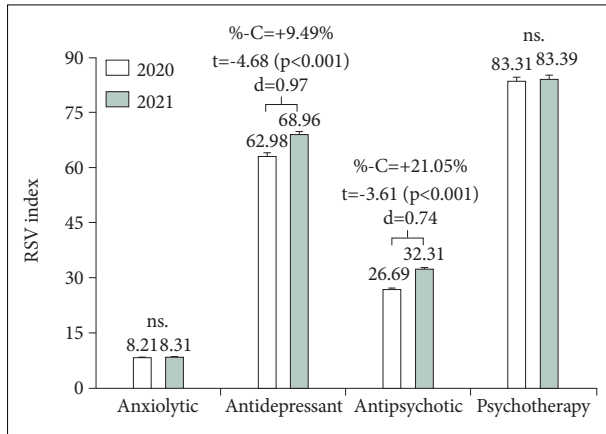
Figure 1. Comparison of relative search volumes (RSV) in Google Trends for the terms "anxiolytic," "antidepressant," "antipsychotic," and "psychotherapy" between 2020 and 2021. Error bars denote standard errors of the mean. d, Cohen's d; t, Student's t-test. %-C, percentage of change in mean RSV values between 2020 and 2021; ns., non-significant differences.

though, it may be relevant to consider that different forms of accessing therapeutic methods could impact search behavior. For example, people without previous mental health disorders, seeking psychiatric or psychotherapeutic treatment for the first time, and patients with psychopathological diagnoses who use psychotropic drugs may guide their information web search differently.

There are several limitations to be considered in this study. Firstly, the Google Trends provides information only on users with internet access who use Google as a web search engine. Secondly, the data on search volumes collected by Google Trends are relative, not absolute. Finally, the spelling choices can affect the results and there is no standard procedure for data collection using this tool.

In conclusion, this study allows us to identify the main global information needs of the population regarding several psychiatric treatments during the COVID-19 pandemic and the variations experienced by them between 2020 and 2021. After the first year of the pandemic, the rise in the public interest on antidepressants and antipsychotics may reflect a possible increase in worldwide mental health problems that need psychological and/or psychiatric treatment. Specifically, it is possible that there has been an increase in psychopathology related to mood disorders and psychotic pathologies and a worsening of patients with severe mental disorder. A practical implication of this study from public health perspective (based on the increased information needs in specific treat-

ments, observed during the pandemic in 2021) could be the provision of more detailed information about the psychological and psychiatric interventions in worldwide public campaigns aimed at mental health care.

Availability of Data and Material

Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

Author Contributions

Conceptualization: Juan Antonio Becerra-García. Data curation: Juan Antonio Becerra-García, Teresa Sánchez-Gutiérrez. Formal analysis: all authors. Funding acquisition: Juan Antonio Becerra-García, Ana Calvo. Investigation: Juan Antonio Becerra-García. Methodology: all authors. Project administration: Juan Antonio Becerra-García, Teresa Sánchez-Gutiérrez. Resources: Juan Antonio Becerra-García, Teresa Sánchez-Gutiérrez. Supervision: Juan Antonio Becerra-García. Validation: Juan Antonio Becerra-García, Sara Barbeito, Teresa Sánchez-Gutiérrez, Ana Calvo. Visualization: all authors. Writing—original draft: Juan Antonio Becerra-García. Writing—review & editing: all authors.

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