



## LETTER TO THE EDITOR

**Suicide in Colombia: an assessment of population interest using Google Trends**

Suicidio en Colombia, una evaluación de su interés poblacional con el empleo de Google Trends

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**Dear Director:**

COVID-19 pandemic has presented a challenge to all human beings worldwide. Facing uncertainty, contagion, loss of family members, tele-working modality, unemployment, home studies and restrictions of physical contact demand time for adaptation and result in fear, worry and stress.<sup>(1)</sup> Situations that can lead to exacerbations of mental disorders, self-harm or suicidal behavior.<sup>(2)</sup>

Suicide is considered a public health problem; the World Health Organization (WHO) reveals that 703,000 people commit suicide every year and for every completed suicide there are many suicide attempts.<sup>(3)</sup> There is stigma, taboos and beliefs surrounding the subject, which is why the International Association for Suicide Prevention (IASP) and the WHO make every September 10 World Suicide Prevention Day (WSPD) with the aim of raising awareness of the issue.<sup>(4,5)</sup>

Despite worldwide records of suicide, the behavior in each country may vary, however, it is estimated that 77 % of suicides occur in countries with low and medium resources.<sup>(3)</sup> In Colombia, according to data from the National Institute of Health (INS in Spanish) until the beginning of September 2021, there has been an increase in the rate of suicide attempts compared to the immediately preceding year. In addition, the agency predicts that triggers and susceptibility to certain risk factors are increasing in intensity due to the effects of COVID-19 pandemic and could trigger more suicide attempts in the next years.<sup>(6)</sup>

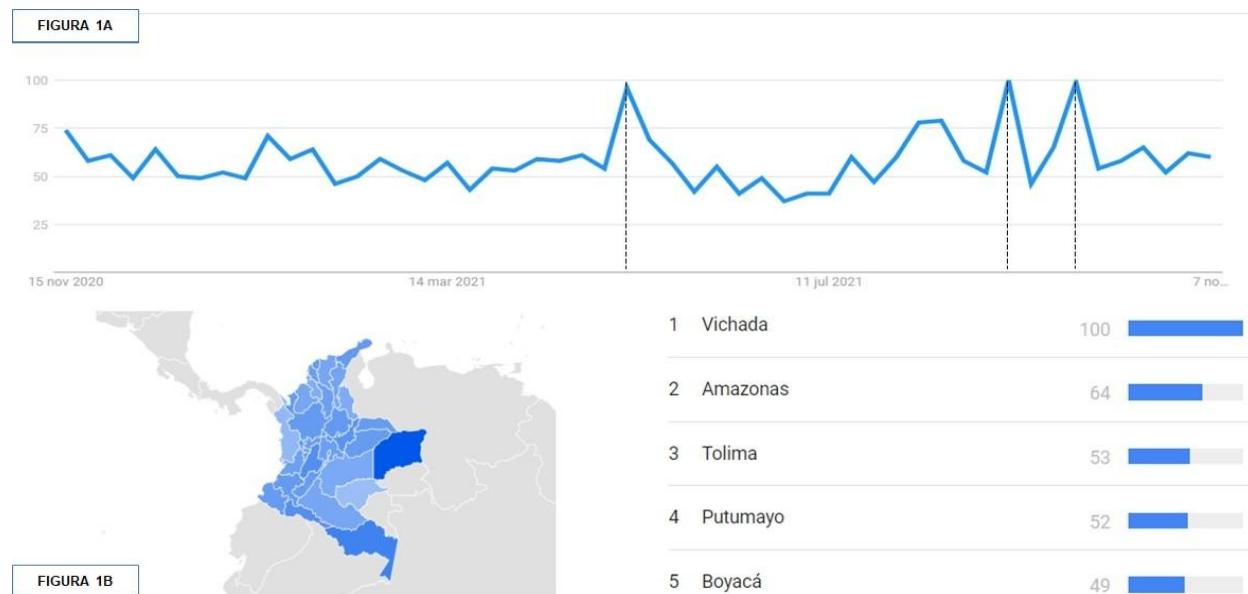
In order to know the interest of the Colombian population in this topic, an assessment was made using Google Trends, a tool used to obtain information applicable to the health field;<sup>(7,8,9)</sup> which includes queries related to geographic location and time in which the search was performed.<sup>(8)</sup> The data can also be provided considering two categories: <related queries in increase> identifying the increase in search frequency and <major related queries> related to the most popular queries.<sup>(10)</sup>

An analysis of the last 12 months (15/November/2020 to 7/November/2021) was performed using the term "suicide", and the category "topic". It was found that during the year the rate of interest in this topic remained stable with an average of 42 %, with peaks of approximately 100 % in the weeks from May 9 to 15, followed by the week between September 5 and 11, as well as from September 26 to October 2 (Fig. 1A), with the departments with the highest search rates being: Vichada, Amazonas, Tolima, Putumayo and Boyacá (Fig. 1B).

The increase in the rate of interest in searches on the topic of suicide in Colombia to almost 100% can be correlated with three events, as follows: the first and third week are coincident with the suicides carried out by two young people, one in the framework of the national strike<sup>(11)</sup> and the other of a young man who threw himself from a fourth floor in a shopping center in the city of Barranquilla,<sup>(12)</sup> for its part, the increase in the rate of interest in searches in the week of September 5 to 11 is related to the WSPD.<sup>(5)</sup>

All these events may reflect two situations; the first one: that the interest in this topic may vary depending on the current situation being experienced in the country, as well as depending on the influence of the media and social networks that are responsible for disseminating news on this topic and the second where it is evident that campaigns in favor of creating awareness and sensitivity around WSPD are generating an acceptable interest in the Colombian population. However, in the evaluation carried out, a worrying finding was found in different search sections such as: in <related queries on the rise>, the following phrases were observed: "How to commit suicide without pain" "ways to commit suicide" "collective suicide" etc, (Fig. 2 A,B) and in <main related queries> phrases such as: "ways to commit suicide" "how to commit suicide", "what is suicide", "how to commit suicide without pain", among others were found. (Fig. 2C)

This last situation reveals the interest of some Colombians in wanting to commit suicide despite the campaigns that exist to avoid this situation, which is alarming. Thus, the search phrases found during the evaluation as well as the INS data generate several questions to which as members of the health team we are obliged to suggest answers: are mental illnesses that end up leading to suicide under-diagnosed in Colombia? Will national and international awareness campaigns on suicide prevention reduce suicide attempts in the future? Is there another type of intervention necessary to care for the mental health of the Colombian population in the midst of the pandemic and thus prevent suicides? Based on these reflections, we invite you to pay special attention to this issue.



**Fig. 1-A.** Graph of the trend in searches on the topic of suicide in Colombia in the last 12 months, note the 3 maximum search peaks (black dashed lines) in the different weeks of the year 2021.

**Fig. 1-B.** Map of Colombian departments with the highest number of searches on the topic of suicide. Data obtained through Google Trends.



**Fig. 2 A, B.** Phrases found in related queries on the rise.

**Fig. 2C.** Phrases found in top related queries.

**Authors' contributions**

MALS and MCMJ: were responsible for conceptualization, formal analysis, project management, writing - original draft, writing - revision and editing. All authors agreed the final manuscript.

**Conflict of interest**

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