

# SELF-INJURY IN WOMEN IN THE STATE OF SÃO PAULO



https://doi.org/10.56238/arev6n1-023

Submission date: 08/27/2024 Publication date: 09/27/2024

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#### **ABSTRACT**

Introduction: Self-injury is an action against one's own body, which has a possible association with mental health. This panorama is of paramount importance to be analyzed, in order to understand the etiology in a more specific way, and then effectively combat self-injuries and their harms. Objective: To analyze the epidemiological profile of self-harm caused by women in the state of São Paulo. Method: Epidemiological, cross-sectional study, based on data analysis from the DATASUS platform. Cases from 2018 to 2022 related to self-injury in women in the state of São Paulo were analyzed. Results: A total of 61,568 cases of self-injury were observed in women, in the age group of 20 to 59 years, among them the highest rate of self-injury in 2022 with 27% and among the age group of 20 to 29 years, corresponding to 44% of the total. In addition, social indicators related to self-injury were also evaluated and discrepancies were observed in terms of race and education. Discussion: The results analyzed showed a significant variation between social indicators, especially in relation to age and color. It has not yet been possible to verify a direct relationship with the COVID-19 pandemic, but this is partly due to the impact caused by the underreporting of data and the type of study.

**Keywords:** Self-Destructive Behavior, Women, Preventive Psychiatry.

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#### INTRODUCTION

Self-injury is defined as an action against one's own body without the initial intention of causing death (LUCENA; HOLLAND; BELMINO, 2020)1. There are types of self-injurious behavior, with those who are potentially suicidal, that is, they practice the injury with the intention of self-extermination and those who are not suicidal, who have attitudes of destruction of body tissues, but without the intention of death. The etiology is diverse and nonspecific, but it is often related to psychiatric diseases and a history of trauma (MANUAL COMPORTAMENTO AUTOLASIVO, 2019)2.

The causes of self-injury are not very well understood, this behavior was added to the diagnostic manual in mental health (DSM-5) in 2013, which helps in the diagnosis and the need for attention to these people. With this, some signs of recognition were implemented, such as a change in school performance; in the friendship group; constant mood swings; appearance of cuts, burns, bruises; use of long-sleeved clothing, even in the heat; having sharp materials in possession, and from the observation of any of these, it becomes necessary to identify the occurrence of self-injury and then try to remedy it, or even prevent it (DSM, 2013)3.

There is a notorious scarcity of scientific articles focusing on understanding the causal specificity of self-injury, in addition to the lack of a clear consensus regarding the direct correlation with COVID-19. Therefore, it is of paramount importance to develop new studies covering this period, thinking mainly about prevention and personalized treatment according to the public's needs and focusing on the resolution of the primary cause and not on the signs and symptoms.

That said, this article aims to analyze the epidemiological profile of self-inflicted injuries in women in the state of São Paulo. Because the etiology of self-injury is not specifically understood, especially in this period of COVID-19, it is not possible to prevent or remedy new cases. According to Paulo Saldiva, a physician, born in 1954, "the bigger the city, the greater the risk of mental illness", so the city of São Paulo, known as "the city that does not stop", is the place of interest precisely because of this great economic and social movement.

## **METHODOLOGY**

This is an epidemiological, ecological, retrospective, observational study with a quantitative approach, in order to analyze the epidemiological profile of self-inflicted injuries,



in the period from 2018 to 2022 in the state of São Paulo/SP. With data extracted from the platform of the Department of Informatics of the Unified Health System (DATASUS Tabnet), in the subsections of the Notifiable Diseases Information System (SINAN), at a single time with subsequent association with the literature review.

For data collection and tabulation, Microsoft Excel® 2019 software was used, according to the variables studied (race/ethnicity, education, age group from 20 to 59 years, and self-harm by the "own person" criterion). In order to perform epidemiological calculations, these data were evaluated by means of simple relative frequency analyses, based on percentage calculations.

After data collection, a literature review was analyzed using the descriptors "women", "self-inflicted injury" and "São Paulo" in the PubMed, Lilacs and Virtual Health Library (VHL) databases. The period from 2018 to 2023 was included, in Portuguese, English and Spanish, researched during the months of September and October

2023. The excluded articles were those that were not related to the topic, and that were not in the period researched.

It is worth noting that the present study was based on public and anonymous data from the DATASUS platform of the Ministry of Health, so it is not necessary to have approval from the Research Ethics Committee according to Resolution No. 510 of the National Health Council, which exempts research from which it makes use of information in the public domain.

### **RESULTS**

In view of the years 2017-2022, the epidemiological evaluation of the occurrence of self-injury in women, in the age group of 20 to 59 years, shows a total of 359,322 cases. The highest number of events occurred in 2022 with 82,480 (22.95%). In that same year, the age group with the highest absolute value was 20-29 with 32,487 (9.04%), followed by 30-39 with 25,110 (6.99%), 40-49 with 17,244 (4.78%) and 50-59 with 7,639 (2.16%). Second

2021 is in place, with 69,943 cases (19.46%), and in third 2019, with 59,769 cases (16.63%). In terms of age group, the youngest population, aged 20-29 years, corresponds to 39.50% of the total (n = 141,918), while those aged 30-39 years the records drop to 112,025 occurrences, corresponding to 31.18%. Finally, 71,634 cases (19.93%) were found in the 40-49 group and 33,745 cases (9.39%) in the 50-59 age group.



In addition, the number of cases by race and color was evaluated, taking into account white, black, yellow, brown, indigenous and cases with unknown race/color. In the white race, the largest number of events was obtained, totaling 181,440 (50.46%). Among the other races, there were: 116,906 cases among the brown population (32.54%), 31,609 cases among the black race (8.80%), and 26,354 cases referring to people with their race unknown, corresponding to 7.33%. Among the lowest number of occurrences are yellow and indigenous, with 2,161 and 852 cases respectively. Regarding gender, there was a predominance of females with 73.08% (n = 262. 607), males obtained 26.85% (n = 96,498), and 217 people were not classified according to gender, having therefore been ignored.

From another perspective, in terms of education, in most of the occurrences the level of education was not recorded (n = 126,561), corresponding to 35.22% of the aggressions. Among the cases in which schooling was recorded, the group that stood out the most was the population with complete secondary education, with 26.25% (n = 94,341). The other groups had much lower numbers of cases. Followed by the population with complete secondary education are: persons with incomplete secondary education with 8.85% (n = 31,821), incomplete 5th to 8th grade 8.03% (n = 28,847), complete elementary education 6.58% (n = 23,645) and complete higher education 5.09% (18,282). In the final finding, 15,093 cases (4.20%) were registered in people with incomplete higher education, 10,739 occurrences (2.99%) had incomplete the 1st to 4th grade of elementary school and 8,173 women and men finished the 4th grade of elementary school (2.27%). In the illiterate population, a total of 1,501 cases (0.42%) were detected, in addition, in 319 people (0.09%) the item of education did not apply.

## **DISCUSSION**

This study reveals a significant variation in the number of cases of self-injury in women. When social indicators are analyzed, it is observed that this practice is predominant in women who are in the economically active age group, often at the peak of their careers, between 20 and 49 years old, and still with a peak at the reproductive peak (20-30 years). The disparity observed in the racial sphere is also highlighted, evidencing a prevalence of cases above 50% among white women. With regard to education, the lack of information compromised most of the data analyzed, however, among the answers obtained, women with complete secondary education lead the statistics of self-injury. Weighting the item sex, women overlap with men in a ratio of 2.7:1, in a population of 359,075 people.



When reviewing the occurrences of self-injury over the years, an increase in the number of cases in the years 2021 and 2022 is noticed compared to previous years. Some factors correlated to this increase may include the COVID-19 pandemic. However, when looking at the overall panorama of the pandemic, there is a significant increase in early 2021, followed by a regression due to the implementation of sanitary measures and the distribution of vaccines to various populations.

From this perspective, at the beginning of the COVID-19 pandemic, in 2020, there was a considerable reduction in cases of self-injury compared to 2019. However, when comparing these data with the results of previous studies, especially that of (ALMEIDA; SILVA; SAINTS; et al., 2021)4, which directly correlated self-injury with the pandemic, a controversy arises. The article highlighted an increase in the incidence of self-injury in this period, which does not seem to be corroborated by the data analyzed in this study, since an initial increase in the number of cases followed by a decline in subsequent years was found.

Furthermore, during the COVID-19 pandemic, the impact on mental health was evident due to social isolation, deprivation of group activities, loss of loved ones, among other factors (FARO, BAHIANO, NAKANO ET AL., 2020)5. Some studies indicate that the simple act of taking the test for COVID-19 increased the risk of self-injury in the general population, due to increased anxiety and fear of the result (KIN; JEONG; PARK et al., 2023)6. Although these points are pertinent and consistent, this data analysis does not allow for direct confirmation, due to the lack of specific information on social isolation and other factors experienced during the pandemic.

However, it is possible to infer that there is a relationship with the consequences of the pandemic. In this sense, the increase in self-injury seems to be correlated with increased socialization difficulties as the pandemic progressed and the subsequent reduction in COVID prevalence. This is partly due to prolonged isolation and difficulty in coping with significant economic losses and the loss of friends and loved ones7. It is relevant to note that the world was going through a great process of mourning, according to Freud's psychoanalytic concept of mourning.

Ultimately, due to the cross-sectional nature of this study, we cannot affirm a direct association between COVID-19 and the increase in observed self-injury cases8. More indepth studies and alternative methodologies are needed to investigate this possible relationship. In addition, it is important to recognize possible limitations, since data



collection was carried out on an electronic platform, DATASUS, which may have resulted in underreporting, especially during an atypical period and significant restrictions.



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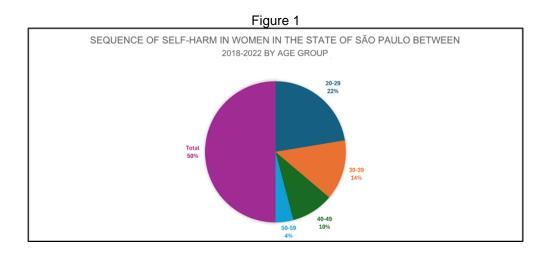




Figure 2

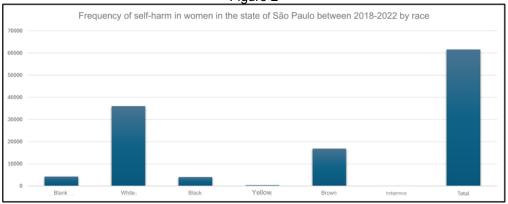


Figure 3

