

ANALYSIS OF PHYSICAL VIOLENCE IN SANTA CATARINA, BRAZIL

ANÁLISE DA VIOLÊNCIA FÍSICA EM SANTA CATARINA, BRASIL

ANÁLISIS DE VIOLENCIA FÍSICA EN SANTA CATARINA, BRASIL

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ABSTRACT

To analyze physical violence in Santa Catarina by macro-region, relating sociodemographic aspects compared to the Brazilian reality. Descriptive cross-sectional epidemiological study. It included the reported cases of physical violence in 2017, relativized with the following aspects: gender, race, education and average household income per capita. Data were collected from SINAN, IBGE and CENSO 2010. In Santa Catarina, the frequency of cases of physical violence was 3.68 cases for every 10,000 people, equal to the Brazilian average. The highest prevalences were: female sex, 5.71 cases for every 10,000 women; indigenous race; secondary school education or more (48.71%) and income below the current minimum wage. The present study suggests that in Santa Catarina the findings are contradictory regarding race, education and income, in relation to physical violence in general in Brazil.

Keywords: *Violence; Public Health; Vulnerability Analysis; Demographic Indicators; Health Information Systems.*

RESUMO

Analisar a violência física em Santa Catarina por macrorregião, relacionando aspectos sociodemográficos em comparação à realidade brasileira. Estudo epidemiológico transversal descritivo. Incluiu os casos notificados de violência física em 2017, relativizados com os seguintes aspectos: gênero, raça, escolaridade e renda média domiciliar per capita. A coleta foi realizada a partir de dados do SINAN, IBGE e do CENSO 2010. Em Santa Catarina, a frequência de casos de violência física foi de 3,68 casos para cada 10.000 pessoas, equiparando-se à média brasileira. As maiores prevalências foram: sexo feminino, com 5,71 casos para cada 10.000 mulheres; raça indígena; escolaridade de segundo ciclo completo ou mais (48,71%) e renda abaixo do salário-mínimo vigente. O presente estudo sugere que em Santa Catarina os achados são contraditórios quanto à raça, escolaridade e renda, em relação à violência física de modo geral no Brasil.

Palavras-Chave: *Violência; Saúde Pública; Análise de Vulnerabilidade; Indicadores Demográficos; Sistemas de Informação em Saúde.*

RESUMEN

Analizar la violencia física en Santa Catarina por macrorregión, relacionando aspectos sociodemográficos con la realidad brasileña. Estudio epidemiológico descriptivo transversal. Se incluyeron los casos de violencia física reportados en 2017, relativizados con los siguientes aspectos: género, raza, educación e ingreso familiar promedio per cápita. Los datos fueron recolectados del SINAN, IBGE y CENSO 2010. En Santa Catarina, la frecuencia de casos de violencia física fue de 3.68 casos por cada 10,000 personas, igual al promedio brasileño. Las prevalencias más altas fueron: sexo femenino, 5,71 casos por cada 10.000 mujeres; raza indígena; educación secundaria o más (48,71%) e ingresos por debajo del salario mínimo actual. El presente estudio sugiere que en Santa Catarina los hallazgos son contradictorios en cuanto a raza, educación e ingresos, en relación con la violencia física en general en Brasil.

Palabras Clave: *Violencia; Salud Pública; Análisis de Vulnerabilidad; Indicadores Demográficos; Sistemas de Información Sanitaria.*

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INTRODUCTION

The World Health Assembly, held in 1996, recognizes the increase in intentional violence in the world, which affects people of both sexes and of all ages, in particular women and children, declaring it to be an important public health problem¹.

Violence is understood as a multifaceted and socio-historical phenomenon, nourished and shaped by political, economic and cultural aspects that translate into everyday relationships between subjects and institutions, which is a learned and internalized process².

Considering its transcendence and magnitude, violence is recognized as a complex Public Health problem. For this reason, Brazil adopted the strategy of universal notification of cases of interpersonal violence, making it the object of public policies with the purpose of guaranteeing and promoting social rights and protection of victims of this condition³.

Physical violence is a social and public health problem in the world. In Brazil, violence has been the subject of debates among representatives of the population, due to its impact on people's quality of life and the demands for attention and health care that it demands⁴.

Maltreatment comprises four categories: physical, sexual, psychological abuse and neglect. Physical abuse is called physical violence and is considered as the use of physical force or power, threatening or effectively against another person, group or community. In most cases, it is accompanied by emotional violence, in the form of intimidation and verbal abuse⁵.

It is not easy to identify the immediate association between structural factors and violence, nor can it be said that they necessarily determine its occurrence. However, such factors are capable of determining transformations in society that create a basis for the development of violent behavior. Macrosocial aspects are configured in the most difficult conditions to be modified and, perhaps for this reason, are more relevant as the main causes of

violence. As macro-social factors, the author points out: increase in social inequalities, improvement in education accompanied by the contradictory increase in unemployment, expansion of personal aspirations and the impossibility of satisfying them, reduction of social control exercised by the family and religions⁶.

On the other hand, in a study carried out in the state of Ceará, which illustrates the epidemiological profile of violence in the state, different results were observed. Data were found that defined a predominance of violence in females, with the most common age group among young adults, from 20 to 49 years old, mostly mixed race, with the majority having low schooling, with only complete elementary school or illiterate, and most violence concentrated in urban regions⁷.

Thus, due to the range of variables and the different patterns of presentation of this theme, the present study aims to analyze the factors associated with physical violence in the state of Santa Catarina in relation to Brazil, by health macro-region, considering sociodemographic aspects - in year 2017. This research is justified by the high rates of violence and the strong consequences it causes, both for victims and for health services and to determine what relationships can be established regarding the social and economic aspects of determining violence.

METHODS

This is an analytical cross-sectional epidemiological study. The collection was carried out from February to March 2020, based on secondary data from the Notifiable Diseases Information System (SINAN) in the year 2017. During the period of carrying out and developing the research, the year 2017 was the last one with availability of access to consolidated data in the information system. Data on physical violence in people aged 20-59 years, notified in 2017 in the health macro-regions of Santa Catarina, were collected and the following sociodemographic aspects were compared: gender,

race, education and average per capita income. Data from the 2010 CENSO Brazilian Institute of Geography and Statistics were used to compose the proportionality in the macro-regions. Santa Catarina has 7 health macro-regions and 16 health regions (PDR 2018).

Data on physical violence were collected from the number of reported cases in men and women reported by the health macro-regions of the state of Santa Catarina. They were obtained through the SUS Disease Notification System, Department of Informatics of the Unified Health System (DATASUS), obtaining the ratio of cases per 10,000 people.

As for the education aspect, based on how the data were found, we observed the following division: not determined; without instruction/incomplete 1st elementary cycle; 1st complete fundamental cycle/2nd incomplete fundamental cycle; and 2nd complete elementary cycle or more. In this division, the first fundamental cycle corresponds to the first 4 years of study, while the second fundamental cycle concerns the 6 subsequent years.

As for the population, by race in the health macro-regions, data for Santa Catarina were obtained by the total proportionality of the cases in each race (unknown/white, white, black, yellow, mixed-race and indigenous), added to all macro-regions to obtain a single value - and the total population of these in the entire state of Santa Catarina, determining the ratio of cases per 10,000 people.

As for the inclusion criteria, data on physical violence, which occurred in 2017, in people between 20 and 59 years old, were considered. The exclusion criteria used were data on other types of violence, such as psychological/moral, torture, sexual, among others. Data on physical violence occurred in people under 20 years of age or over 59 years of age were excluded from the research.

The TABWIN software version 1.4.1 was used to extract and process data from the public health system. A descriptive analysis was performed, obtaining absolute and relative frequency.

The work sought to make connections regarding the possible sociodemographic economic aspects in determining the physical violence suffered in the health macro-regions and to identify where this type of violence is most prevalent, as well as which demographic aspects are most associated with the occurrence of violence. The maps of the health macro-regions were considered to better explore the results of this research.

This research did not involve intervention in human beings, as it was a study based on a public domain database. It was not necessary to submit the project to the Research Ethics Committee.

RESULTS

The results found from the state of Santa Catarina are presented below. The percentages of physical violence by gender, race, education and average household income per capita were observed.

Table 1 - Characterization of reported cases of physical violence in the health macro-regions of the state of Santa Catarina in 2017.

Health Macroregions	Population	Absolute frequency	Relative frequency*
Alto Vale do Itajaí	1.064.245	526	4,95
Foz do Rio Itajaí	683.034	409	5,98
Grande Florianópolis	1.172.076	624	5,32
Grande Oeste	789.571	696	8,81
Meio Oeste e Serra Catarinense	916.238	396	4,32
Planalto Norte e Nordeste	1.383.456	867	6,26
Sul	992.541	675	6,80

*per 10.000 inhabitants

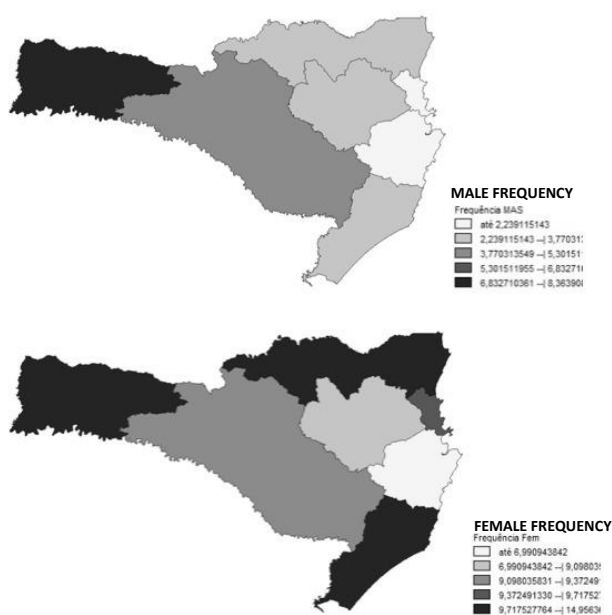
Source – DATASUS/SINAN

In its entirety, the state of Santa Catarina had 2,510 cases of physical violence in 2017, in a population of 7,001,161, which represents a relative frequency of 3.68 cases, equating to the relative frequency found in the Brazilian population by this study of 3.64 cases.

The state of Santa Catarina presents, in absolute numbers, in the macro-region Grande Oeste, 490 notifications, while the macro-region Foz do Rio Itajaí presented 194. When proportioning the macro-region, Grande Oeste remained with the highest relative frequency, with 6.29 cases, while the Grande Florianópolis macro-region had a relative frequency of 2.12 cases, the lowest frequency in the state.

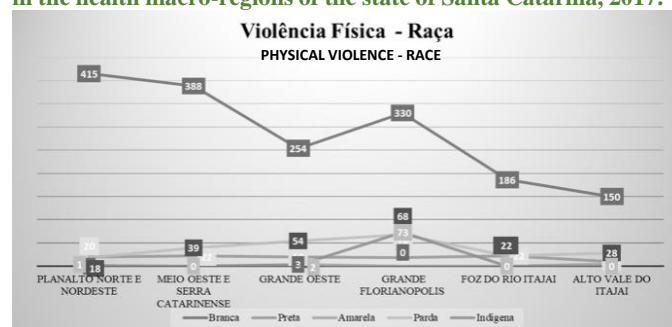
When analyzing the data regarding gender, in males, the highest relative frequency was in the Grande Oeste macro-region, with 4.59 cases per 10,000 men, while the lowest relative frequency was in the Grande Florianópolis macro-region, with 0.39 cases. In the case of females, the Grande Oeste macro-region also had the highest relative frequency, with 8.04 cases, while the Grande Florianópolis macro-region had the lowest relative frequency, with 3.81 cases. It was also observed that, while there are 1.77 cases for every 10,000 men, there are 5.71 cases for every 10,000 women.

Figure 1 - Relative frequency of reported cases of physical violence related to gender in the health macro-regions of the state of Santa Catarina.



Source – DATASUS/SINAN

Figure 2 - Number of reported cases of physical violence by race in the health macro-regions of the state of Santa Catarina, 2017.



Source – DATASUS/SINAN

When the population was stratified by race in the macro-regions, the absolute frequency obtained was 45 cases in unknown/white, 2013 in white, 119 in black, 9 in yellow, 245 in brown and 79 in indigenous. The highest number of cases in each race, by health macro-region, was 415 cases in whites in the Sul; 22 cases in black people in the Planalto Norte and Nordeste and Grande Florianópolis; 5 yellow cases in Foz do Rio Itajaí; 68 cases in pardos in the Grande Oeste; and 73 cases in indigenous people also in the Grande Oeste. The lowest absolute values for each race, also divided by macro-region, were: 150 cases in whites in Foz do Rio Itajaí; 8 cases in black race in the Alto Vale do Itajaí macro-region; 0 cases in yellow in the macro-regions Sul, Planalto Norte and Nordeste, Grande Oeste and Grande Florianópolis; 16 cases in pardos in Alto Vale do Itajaí; and 0 cases in indigenous peoples in the Planalto Norte e Nordeste, Grande Florianópolis and Alto Vale do Itajaí. It is observed, therefore, that in the state of Santa Catarina, the indigenous race is the one that suffered the most physical violence in 2017, according to the records in the information systems.

Figure 3 - Frequency of reported cases of physical violence by schooling in Santa Catarina, 2017.



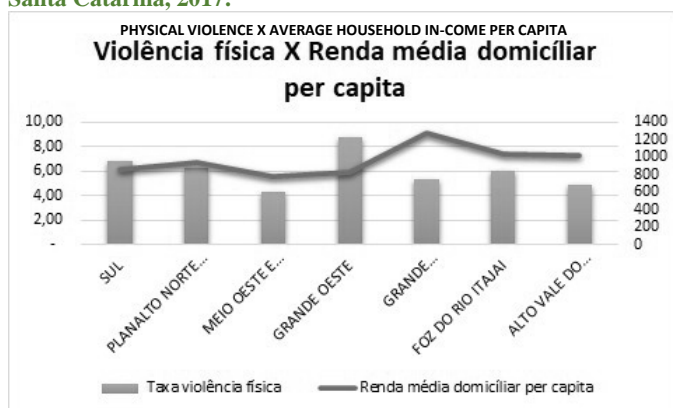
Source – DATASUS/SINAN

The data show that, in the state, 20.76% of reported cases of physical violence occurred in people with undetermined schooling, 7.65% in people with no education or incomplete primary education, 22.84% in people with complete first cycle or incomplete second cycle and 48.71% in people with complete second cycle or more.

When we evaluated the average household income per capita, in Figure 4, Grande Florianópolis had the highest per capita income, with around R\$ 1271.21, while the Meio Oeste and Serra Catarinense had the lowest, with around R\$ 1271.21. of BRL 785.04.

The data show that 3 of the 7 macro-regions had a per capita income higher than the minimum wage in effect in 2017. In these 3, there were 755 cases of violence in 2,814,617 people, representing a frequency of 2.68 cases per 10,000 inhabitants. In the other 4, 1,755 cases of violence were reported in 4,004,507 people, which represents a frequency of 4.38 cases per 10,000 inhabitants.

Figura 4 - Number of reported cases of physical violence related to average household income per capita in the macro-regions of Santa Catarina, 2017.



Source – DATASUS/SINAN

DISCUSSION

In 2017, throughout the national territory, there were 74,466 reported cases of physical violence, in an estimated population of 204,450,380 inhabitants, which represents a frequency of 3.64 cases for every 10,000 people between 20-59 years old. In the state of Santa Catarina, there was a higher prevalence of physical violence among women, with an average household income per

capita below the current minimum wage and an indigenous race.

As shown, the frequency of reported cases of physical violence in females is much higher than the number of cases in males. As an example, it is worth mentioning the highest values for both sexes, in which 7.54 cases were found for every 10,000 men, and 36.55 cases for every 10,000 women, which demonstrates a significant discrepancy. This data is consistent with what was found in studies by Marinho Neto (2020), as well as in the Atlas of Violence, from 2017. Much of this high number of reports of violence against women can be attributed to more effective laws conquered early on. of the 21st century⁷. The notification of violence may, however, be underestimated in the male gender. “Women seek health services more than men. It is important to consider that this notification instrument does not include the notification of urban violence, in which men are the main victims”^{3:409}.

A high number of cases were found in which schooling was not determined. This can be justified by problems in collecting this information, compromising the analysis. Those responsible for reporting violence may not be following the recommendations for completing the form. This data was consistent with the study by Silva et al.³. Regarding education, the highest frequency was also in the ignored/blank category. This demonstrates a lack of adequate training, or that the information, from the point of view of the professionals who make the notification, was considered irrelevant in the Violence Notification Form, preventing an adequate analysis of the education factor and how to relate it to the vulnerability to physical violence. On the other hand, the Grande Oeste macro-region, in Santa Catarina, had 7.34% of cases of violence against people with undetermined schooling, which can demonstrate the adequate training and qualification of professionals in this macro-region.

Regarding the frequency of physical violence, according to income, the macro-regions that had an average household income per capita above the current minimum wage, with 4.27 cases per

10,000 inhabitants, while for the macro-regions where the average household income -liar per capita was below the minimum wage, it was 3.36 cases per 10,000 people. Just looking at the income data and absolute case numbers, it is suggested that higher per capita income is related to a greater number of cases of violence, but when taking into account population data, it is observed, for example, that the macro of the Distrito Federal, despite having a population about 4.5 times greater than the macro Sertão Central, of Ceará, its number of cases is only 2.4 times greater, which leads us to relativize, pointing out that lower per capita income is related to a higher number of cases of violence. This refers to several factors, cultural or not, that demonstrate that populations with lower incomes are more prone and vulnerable to physical violence. The finding that populations with higher incomes suffer more violence is in conflict with the 2017 Atlas of Violence, which pointed out that the “poor” are the most vulnerable to violence. This also leads us to think about how the access to health and information of this population is outdated, since, although they probably suffer more cases of physical violence, the numbers indicate lower values, which demonstrates that this population is often sometimes he does not get access to the health professional to report the violence he has suffered.

In this study, it was possible to observe that, at the Brazilian level, the sociodemographic aspects that make people more vulnerable to physical violence are the female sex, the mixed race and the per capita income above the current minimum wage, since these were the sociodemographic aspects that indicated higher frequencies of violence. These findings corroborate the study carried out, as it pointed out that “the main victims are women and brown-skinned individuals”. However, it clashes with the research by Silva et al.³, in which the low-income population was the biggest victim of violence. Regarding education, it was not possible to conclude, given the high number of cases in which the Notification Form did not specify education. This finding is also consistent with the study by

Palazzo et al.⁴, in which the high percentage of 'unknown' indicated that such information was possibly not prioritized by health professionals. However, in terms of per capita income, access to health care and information should be highlighted.

In the state of Santa Catarina, the data indicate that the frequency of cases of physical violence among females is also higher than among males. In total, 603 cases were reported in males, in a population of 3,416,585 men, while in females there were 1,907 cases in 3,399,539 women. These findings are consistent with data found in the rest of Brazil, as well as studies by Silva et al.³ and the 2017 Atlas of Violence.

In Santa Catarina, the highest frequency of cases of violence was in the population that had completed secondary school or higher, with about 48.71% of cases occurring in this population. It should be taken into account, however, that the education aspect in the state of Santa Catarina was not estimated in only 20.76% of the cases, and also that about 57.60% of the Santa Catarina population is at the level of education. which was more vulnerable. Thus, notifications in which schooling was not determined may be underestimating the violence data at other levels of schooling. The question that arises, however, is whether there are actually more cases of violence among people with higher education, or whether there are more cases of violence reported among this population, due to factors such as access to health services and information.

The study suggests that macro-regions that had an average household income per capita below the minimum wage showed a higher frequency of physical violence. In the state of Santa Catarina, all 4 macro-regions with an average household income per capita below the minimum wage had higher numbers of physical violence than the others, with higher incomes. The data is consistent with the studies by Silva et al.³ and the 2017 Atlas of Violence, demonstrating that people with lower incomes tend to suffer more violence.

When we mention the race that presented the highest frequency of physical violence in the

state, which was the indigenous, with 79 cases in a very small population, estimated at about 8709 people, it must be taken into account that, historically, this population has limited access to health services and information, which can lead to underreporting of these cases, which can be even more frequent. This result is in conflict with the study by Silva et al.³, who pointed out the brown race as the one that suffered the most violence, reaching a result of 51.6% of victims of the brown race. In the state of Santa Catarina, it is estimated that this race has a frequency of 5.64 cases for every 10,000 inhabitants, the frequency being higher only than that of cases in white race (5.13/10,000), and lower than that of the Caucasian race. frequency in the yellow (5.66/10,000), black (10.30/10,000) and indigenous (95.56/10,000) races. The values found here also diverge from the 2017 Atlas of Violence, which pointed to the black race as the most susceptible to violence. Other studies are necessary to assess the vulnerability of indigenous populations in the state and why their frequency was so high.

Therefore, in the state of Santa Catarina, the sociodemographic aspects that indicated greater vulnerability to suffering physical violence were the female sex, the indigenous race, having completed secondary education or more, and per capita income below the minimum wage. Thus, schooling differs when looking at data at the Brazilian level.

When we look at data from Brazil, we see that physical violence is more prevalent where population rates are higher, among females, with brown skin color, with lower levels of education, especially related to the illiteracy rate, as well as being more prevalent in macro-regions with lower per capita household income. However, in Santa Catarina, the findings were contrary, since, despite having a white majority, with a higher level of education and with a per capita income above the current minimum wage, violence was very present.

As for the limitation, the essential use of information systems stands out, which are being

treated as a proxy, as they may be underestimated or overestimated.

FINAL CONSIDERATIONS

The study suggests that violence in the state of Santa Catarina showed a different reality compared to the rest of Brazil, in which indigenous women with complete secondary education or more and an average per capita household income below the minimum wage are more related to the occurrence of violence. physics.

It is also inferred that although physical violence is more associated with vulnerable groups, this was not a condition when we look at the territory of Santa Catarina, and that, therefore, violence may be associated with other factors. Thus, we suggest that other studies be carried out to better determine which factors may involve the prevalence of physical violence in places with better infrastructure.

As for the limitation, the essential use of information systems stands out, which are being treated as a proxy, as they may be underestimated or overestimated. And as a potential, to give visibility to data that indicate the need to research other variables that guide the issue of violence, as well as signal weaknesses in the reporting of data on the issue, which triggers the possibility of improvement in the system itself.



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