



SPATIAL DISTRIBUTION AND CHARACTERIZATION OF CASES OF SEXUAL VIOLENCE AGAINST CHILDREN AND ADOLESCENTS IN SOUTHERN BRAZIL

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ABSTRACT

Objective: to characterize the sexual violence suffered by children and adolescents in a municipality in southern Brazil and to identify its spatial distribution pattern. **Method:** this is a quantitative cross-sectional ecological study from data available in the Epidemiological Surveillance sector of the municipality under study in 2018 and 2019. Data collection took place in November 2020. The analysis was performed using the Q-GIS® program version 2.18 and the kernel method. The study was approved by the institution's Research Ethics Committee. **Results:** 137 records of sexual violence were analyzed. Occurrences were more prevalent in females (83.9%) of white color (74.4%) and in the age groups of 5 to 9 (25.5%) and 10 to 14 years (40.8%). It occurred mainly in the city's urban area (62.04%) concentrating on the peripheral region and in the victim's residence (65.6%). The main aggressor was male (91.9%). Spatial distribution was concentrated with a higher density of reported cases in the municipality's administrative regions North, West and Center-East. **Conclusion:** the main type of violence was rape against children and the pattern of spatial distribution of these cases showed a higher density in the peripheral regions characterized as areas of poverty, with social and economic deprivation.

Keywords: Child. Adolescent. Sexual violence. Ecological studies.

INTRODUCTION

Violence represents a public health problem that harms both the integrity of human rights and individuals. Violent acts reduce the quality of life of victims and often impose new problems on their health. With regard to violence against children and adolescents, the situation is even more serious because of physical or psychological damage⁽¹⁾, which impairs the growth and development of these young people.

Children fall into the group of greatest vulnerability to violence because they are characterized as fragile beings⁽²⁾, defenseless by nature due to the need for adult protection during their development process⁽³⁾. They are often coerced by the aggressor not to talk about the act and usually feel guilty about what is happening,

not telling anyone⁽²⁾ due to fear and ignorance of the consequences (for themselves and their family)⁽⁴⁾. On the other hand, adolescents may start to feel afraid and ashamed about what happened, even denying and hiding the fact, instead of denouncing it⁽⁵⁾.

Epidemiological data show that between 2011 and the first half of 2019, more than 200,000 reports of sexual violence against children and adolescents were registered, according to the National Ombudsman's Office for Human Rights. According to the epidemiological bulletin of the Ministry of Health, reports of child sexual violence throughout the national territory increased 83% between 2011 and 2018, especially in the Southeast and South regions⁽⁶⁾.

Considering that only 10% of cases are

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reported to the authorities, Brazil suffered from the impact of more than 2 million cases occurring in this period⁽³⁾. Many cases are framed as “Statutory Rape”, which is defined as any type of sexual relationship, whether sexual intercourse or libidinous act, perpetrated against children under 14, regardless of their consent. The penalty for this crime is 8 to 15 years of imprisonment⁽³⁾.

Violence against children and adolescents must be notified within a period of 24 hours, an action characterized by procedures that assist the application of immediate measures in order to break the cycle of violence and mobilize the protection network for children and adolescents⁽⁷⁾.

The care of children and adolescents who have suffered sexual violence is multisectoral and multidisciplinary, permeating health, police, justice and social protection. The guardianship council is considered the gateway to this service and has the function of ascertaining the domicile and/or institution from which the young people come and discuss the case with the collegiate for decision-making. Afterwards, victims must undergo a clinical and medical examiner care, in which some conducts are performed such as: emergency contraception, prophylaxis and diagnoses of sexually transmitted infections (STI), and pregnancy test. Specialized listening procedures and immediate and long-term socio-assistance care are also carried out, aiming at reducing negative consequences for health and improving well-being⁽³⁾.

The participation of nurses through educational practices for prevention and care for children and adolescents who have suffered sexual violence is considered essential⁽⁸⁾. Such practices include acting in schools and households. When there is suspicion or confirmation of child sexual violence, all physical, psychological and legislative support should be offered in a humanized manner, respecting the child and adolescent's limits, avoiding revictimization and providing empathetic and quality assistance⁽⁹⁾.

Referring to the scientific literature, we found no studies addressing the spatial distribution of sexual violence among children and adolescents in the last five years. We found only one study that addressed the geocoding of child sexual

abuse. Localized studies address child sexual abuse and exploitation; intimate partner violence, increased child marriage, and issues related to victimization, revictimization, and polyvictimization. Furthermore, a systematic review, developed from 50 articles found in SciELO, PePSIC, LILACS, Web of Science and Scopus databases from 1990 to 2015, concluded that the characteristics of victims and situations of violence were the most frequently analyzed⁽¹⁰⁾. Thus, this study advances in the construction of knowledge by presenting data that characterize sexual violence in this age group and the influence of geographical space for the development of violence.

This study is justified not only by the need to make the cases of sexual violence against children and adolescents visible, but also to identify the spatial distribution of these cases, which can direct managers' eyes to specific areas. Thus, it is possible to induce the mobilization of professionals and managers to effectively implement the actions stipulated by current public policies in favor of safety and protection, which is the right of all children and adolescents.

In view of the above, two questions arose. The first is: what characterizes sexual violence suffered by children and adolescents in a municipality in southern Brazil? The second question is: What is its spatial distribution pattern? Thus, this study aimed to characterize the sexual violence suffered by children and adolescents in a city in southern Brazil and identify its spatial distribution pattern.

Method

This is a cross-sectional ecological study in a medium-sized municipality in southern Brazil with approximately 261,000 inhabitants and a territory of 1,780.194 km², distributed in urban and rural areas; it is the 5th most populous city in Rio Grande do Sul and, in isolation, the largest in the region (IBGE, 2015), a reference for health treatment. The municipality has a University Hospital, characterized as a general and public educational institution, of tertiary level, which serves 100% the Unified Health System (*Sistema Único de Saúde* - SUS) and has a specialized outpatient clinic for the care of children and adolescents victim of sexual violence. This municipality's population consists

of different ethnic groups, descending from Indigenous, African, Portuguese, Spanish, German, Polish, Italian and Arab peoples.

Selection criteria were to include all reported cases of sexual violence against children and adolescents that occurred in a municipality in southern Brazil in 2018 and 2019, which represented the last two years before the beginning of this research. We used the age group classification according to the World Health Organization (WHO) and the Brazilian Ministry of Health (*Ministério da Saúde* - MS), which considers the range from 0 to 9 years old as child and, from 10 to 19 years old as adolescent.

Data collection took place in November 2020 using the health disease notification forms registered in the Notifiable Diseases Information System (*Sistema de Informações de Agravos de Notificação* - SINAN), in the Epidemiological Surveillance sector of the Municipal Health Department.

The data obtained were tabulated in Microsoft Excel® version 2016. Afterwards, the cases were characterized considering the following variables related to the victim: age (in years), sex (male or female), skin color, presence of health disorder, place or scenario of occurrence, recurrence of violence, type of sexual violence, procedures and referrals performed. As for the probable perpetrator(s), the variables were: number of people involved in the violence, bond/kinship with the victim, sex of the perpetrator(s), suspicion of alcohol use and age group of the aggressor(s).

To carry out the spatial distribution, the Zip Codes and addresses were imported into

GoogleEarth®, where a preliminary analysis of the addresses obtained in the notification forms was performed. Afterwards, a cloud of points was formed, expressing the residence of origin of each case. For this, the cartographic base of the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística* - IBGE) was used, at a scale of 1:25,000. Next, maps in points and in areas were generated. The data were processed using the Q-GIS software, version 2.18 and free use, identifying the regions or areas with the highest incidence of sexual violence against children and adolescents.

Spatial distribution of cases in the municipality's urban area was performed using the kernel density estimation, which evaluates the density of cases⁽¹¹⁾. At the end, a density map was prepared, using the limits by city administrative regions.

We highlight that the study was approved by the institution's Research Ethics Committee under opinion number 4,206,043 and Certificate of Presentation for Ethical Assessment (*Certificado de Apresentação para Apreciação Ética* - CAAE) no. 36120920.2.0000.5346. The participants' identity was not used and/or disclosed in the research, and the data were treated confidentially and used only for scientific purposes.

RESULTS

In 2018 and 2019, 137 cases of sexual violence against children and adolescents were recorded in the municipality. Table 1 shows the sociodemographic profile of victims.

Table 1. Sociodemographic profile of children and adolescents who suffered sexual violence in Santa Maria in 2018 and 2019. Santa Maria, RS, Brazil, 2021.

| Sociodemographic Variables | Frequencies | |
|----------------------------|-------------|-------|
| | n | (%) |
| Sex (n=137) | | |
| Female | 115 | 83.94 |
| Male | 22 | 16.05 |
| Color/race (n=137) | | |
| White | 102 | 74.45 |
| Black | 16 | 11.67 |
| Brown | 14 | 10.21 |
| Indigenous | - | - |
| Ignored | 5 | 3.64 |
| Age group (n=137) | | |
| 0 - 4 years | 30 | 21.89 |
| 5 - 9 years | 35 | 25.54 |

| | | |
|--|-----|-------|
| 10 - 14 years | 56 | 40.87 |
| 15 - 19 years | 16 | 11.67 |
| Pregnant women (n=115) | | |
| 1 st quarter | 5 | 4.34 |
| 2 nd quarter | 1 | 0.86 |
| 3 rd quarter | 10 | 8.69 |
| No | 31 | 26.95 |
| Not applicable | 65 | 56.52 |
| Ignored | 3 | 2.60 |
| Schooling (n=137) | | |
| Incomplete Elementary School initial grades (until 5 th grade) | 16 | 11.66 |
| Incomplete Elementary School final grades (6 th to 9 th grade) | 29 | 21.16 |
| Complete Elementary School | 10 | 7.29 |
| Incomplete High School | 4 | 2.91 |
| Complete High School | 1 | 0.72 |
| Ignored | 25 | 18.24 |
| Not applicable | 52 | 37.95 |
| Disorder or disability (n=137) | | |
| Yes | 12 | 8.75 |
| No | 113 | 82.48 |
| Ignored | 12 | 8.75 |
| Type of disorder/disability (n=19) | | |
| Physical Disability | 3 | 15.78 |
| Intellectual Disability | 5 | 26.31 |
| Mental disorder | 4 | 21.05 |
| Behavioral disorder | 1 | 5.26 |
| Down Syndrome | 1 | 5.26 |
| Attention-Deficit/Hyperactivity Disorder (ADHD) | 1 | 5.26 |
| Anxiety | 1 | 5.26 |
| Depression | 1 | 5.26 |
| Self-mutilation | 1 | 5.26 |
| Other | 1 | 5.26 |

Source: Research data.

We identified that the largest number of children and adolescents were female (83.94%), mostly white (74.45%) and more frequent in children aged 5 to 9 years (25.54%) and in adolescents aged 10 to 14 years (40.87%). Regarding sexual violence in pregnant women, all were adolescents and 4.34% of them were in the 1st trimester, 0.86% in the 2nd and 8.69% in the 3rd month of pregnancy. About education,

most were marked as “not applicable” (37.95%), implying that the person was not of school age or not literate.

Among those who had any disorder or disability, 15.78% of these were physical, 26.31% intellectual, and 21.05% mental. Table 2 presents data regarding places of occurrence of reported cases:

Table 2. Data on the place of occurrence of sexual violence against children and adolescents in Santa Maria in 2018 and 2019. Santa Maria, RS, Brazil, 2021.

| Occurrence variables | Frequencies | |
|-------------------------------------|-------------|-------|
| | n | (%) |
| Zone (n=137) | | |
| Urban | 85 | 62.04 |
| Rural | 5 | 3.65 |
| Ignored | 2 | 1.46 |
| No information | 45 | 32.85 |
| Administrative region (n=66) | | |
| Urban center | 4 | 6.06 |
| North | 14 | 21.21 |
| Northeast | 6 | 9.09 |
| East | 3 | 4.54 |
| Central-East | 12 | 18.18 |
| South | 4 | 6.06 |
| Central-West | 5 | 7.57 |
| West | 18 | 27.27 |

Location (n=127)

| | | |
|-------------------------|----|-------|
| Public road | 8 | 6.29 |
| School | 6 | 4.72 |
| Grandparents' residence | 2 | 1.57 |
| Victim's residence | 90 | 70.86 |
| Neighbor's residence | 3 | 2.36 |
| Aggressor's residence | 7 | 5.51 |
| Ignored | 11 | 8.66 |

Source: Research data.

Regarding the occurrence data, most cases were in the urban area (62.04%), with prevalence in the administrative regions North (21.21%), Central-East (18.18%) and West

(27.27%). As for the place where most cases of violence occurred, the victim's own residence predominated (70.86%). Table 3 shows the data related to the act of sexual violence:

Table 3. Data on reported cases of sexual violence against children and adolescents in Santa Maria in 2018 and 2019. Santa Maria, RS, Brazil, 2021.

| Variables of sexual violence | Frequencies | |
|--|-------------|-------|
| | n | (%) |
| Type of sexual violence (n=153) | | |
| Rape | 120 | 78.43 |
| Pornography | 3 | 1.96 |
| Sexual exploitation | 2 | 1.30 |
| Sexual harassment | 23 | 15.03 |
| Suspected | 1 | 0.65 |
| Consented | 1 | 0.65 |
| Ignored | 2 | 1.30 |
| No information | 1 | 0.65 |
| Occurred other times (n=137) | | |
| Yes | 42 | 30.65 |
| No | 70 | 51.09 |
| Ignored | 25 | 18.24 |
| Form of aggression (n=140) | | |
| Marked as "no" | 52 | 37.14 |
| Body strength/beatings | 59 | 42.14 |
| Threat | 11 | 7.85 |
| Psychological threat | 1 | 0.71 |
| Firearm | 1 | 0.71 |
| Choking | 2 | 1.42 |
| Abortion | 1 | 0.71 |
| Touching | 1 | 0.71 |
| Sexual abuse | 3 | 2.14 |
| Sharp object | 2 | 1.42 |
| Penetrated fingers | 2 | 1.42 |
| Suspected sexual violence | 1 | 0.71 |
| Consensual relationship | 4 | 2.85 |
| Other types of violence (n=140) | | |
| No | 130 | 92.85 |
| Physical | 2 | 1.42 |
| Psychological | 5 | 3.57 |
| Financial | 1 | 0.71 |
| Negligence | 2 | 1.42 |

Source: Research data.

The predominant type of sexual violence among the cases was rape (78.43%). The act of sexual violence did not recur in most cases (51.09%), but the share of recurrences of 30.65% is worrying. Mostly, the form of aggression included body strength/beatings (40.40%) and, in most cases reported, no other types of violence

occurred (92.85%).

Blood collection (31.66%) was the most performed regarding procedures and prophylaxis, but still a low number compared to total 137 cases. Referral to the Health Network occurred in only 34.60% of cases.

The sex of the probable perpetrator of

violence that predominated was male in 91.97% of cases. However, the link with the victim was well dispersed among the variables present in the table, identified as friend/acquaintance in 15.82%, boyfriend in 13.66%, father in 14.38% and stepfather in 12.94% of cases. The age range of the probable perpetrator of violence was between 10 and 19 years in 22.62% of cases, and between 25 and 29 years in 25.54% of these.

Spatial distribution of cases of sexual violence against children and adolescents

Figure 1 presents the map prepared with the results referring to the spatial distribution of cases of sexual violence against children and adolescents in the municipality by following the kernel density estimation method:

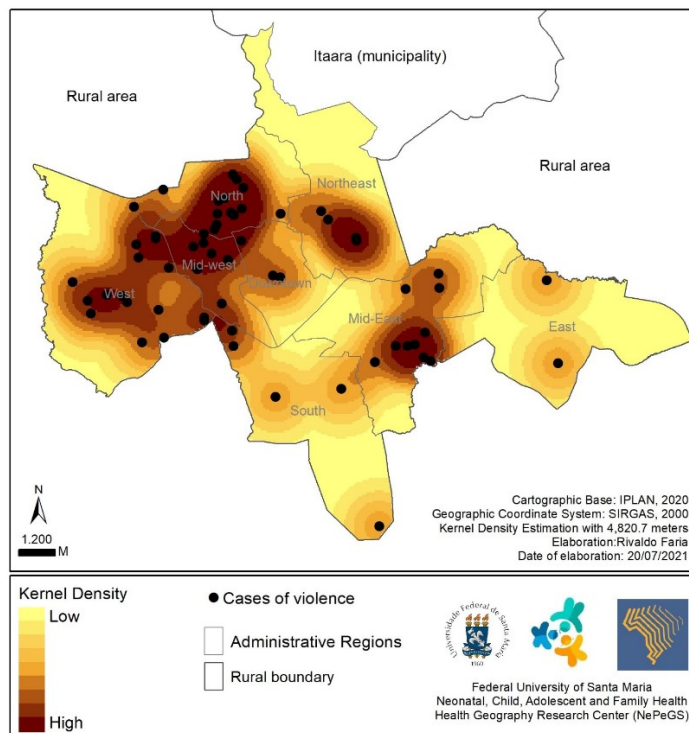


Figure 1. Spatial Distribution and Density of reported cases of children and adolescents who suffered sexual violence in Santa Maria in 2018 and 2019, according to administrative regions. Santa Maria, RS, Brazil, 2021. Prepared by: Rivaldo Faria.

From 137 cases notified, we could georeferenced only 61 because the other notification forms did not contain information related to addresses, essential data for this procedure. We found a higher density of reported cases in the municipality's administrative regions North, West and Center-East. In these regions, there are three neighborhoods considered as the main areas of social and economic deprivation, and a low density of cases in the Center and Camobi neighborhoods.

DISCUSSION

When analyzing cases of sexual violence

against children and adolescents in a municipality in southern Brazil in 2018 and 2019, there was a higher occurrence in female children and adolescents, corroborating findings of similar studies^(11,12). Children and adolescents of white color/race were predominant, unlike studies conducted in other parts of the country, such as in the North and Northeast regions in which the color/race that prevailed was brown^(14,15). This may be related to the fact that the state of Rio Grande do Sul has a colonization mostly formed by Italian, German and Portuguese, since the findings were similar in a research conducted in Porto Alegre, RS⁽¹⁶⁾.

The data analyzed, regarding age, show that the age groups in which most cases occurred

were between 5 and 9 years old in children, and 10 and 14 years old in adolescents. According to a study, children under 14 are considered more vulnerable to sexual violence, since they are influenced, defenseless, immature and often unaware of what to do in these situations⁽¹⁷⁾. Thus, the importance of addressing sex education in schools is evident, as children learn to identify situations of inappropriate intimate contact.

Schools play a key role in combating sexual violence. In these institutions, the theme of sexuality should be addressed with children and adolescents. To this end, the Ministry of Education has provided a guide for educators, so that they can identify signs of violence suffered by children, notify cases and protect them⁽¹⁸⁾. There is no literature that states that the school can prevent cases of violence against children, however the school environment favors contact with adults who can identify the signs and refer the child to the necessary support, including health and social protection services in accordance with the Statute of the Child and Adolescent (*Estatuto da Criança e do Adolescente* - ECA).

Sex education, or the theme of sexuality, is a great ally for the early identification of any form of sexual violence that children and adolescents might suffer⁽¹⁹⁾. It is known that the identification and referral of cases of violence often occur in the school environment⁽²⁰⁾.

Turning to the analyzed data, regarding education, we noticed that the option "not applicable" was the most reported, with 37.95% of cases. This may denote an inadequate completion of notification forms, considering that the age group from 0 to 4 years represented 30 children (21.9%). In a study that sought to analyze the incompleteness of filling out compulsory notifications of violence, it was evident that many mandatory or essential filling variables were not filled out, or were performed inappropriately⁽²¹⁾. This shows the need for training and professional awareness to complete the notification form and qualification of records.

Children and adolescents who suffered sexual violence, for the most part, did not have any type of disability or disorder. However, among those who had it, intellectual disability prevailed, as

well as in a similar research in Bahia, which combined this condition of cognitive or neurological impairment as a possible limitation to the denunciation of violence⁽²²⁾.

Sexual violence is constantly intrafamilial, that is, it occurs inside the household, with the aggressor being linked to the victim by consanguineous ties (parents, siblings, grandparents, uncles, etc.), legality (stepfather, stepmother, brother-in-law, etc.) or affinity (guardianship, custody, adoption, etc.). Therefore, it is practiced by those who should most care for and protect the rights of children and adolescents⁽³⁾. This fact corroborates the narrative that sexual violence against young people is underreported, being even more prevalent among those with special health needs, as they depend even more on family members due to physical and cognitive limitations⁽²²⁾.

On the other hand, having some type of disability would not be a predisposing element for sexual violence, since social and family support can help to protect against this type of violence⁽¹⁶⁾. Thus, the family, the type of upbringing, and the family structure in which the child and adolescent live are important environmental factors to determine the occurrence of this type of violence.

Among the actions recommended to prevent sexual violence against children and adolescents, we mention case mapping, victim care and prevention programs, and discussion on sexuality and gender in various environments, such as family and school⁽²³⁾.

Data from this study show that all notifications contained the occurrence zone, and the Urban Zone appears highlighted. This may be associated with the fact that most of the municipality's population live in this area or with the lack/underreporting of cases from the Rural Zone. However, some forms did not present information such as the neighborhood of occurrence, which was cited in only 66 records. In the division between the administrative regions, a greater number of cases was identified in three of them: North, Central-East and West.

We emphasize that this underreported information would be of great relevance for the spatial distribution of cases. In addition, it would be possible to verify, in a more reliable way, the territories of greater social vulnerability, as well

as to implement more targeted actions within the scope of Primary Health Care. The incompleteness of information in the notifications on violence decreases the performance of the municipality's surveillance and hinders the elaboration and applicability of these actions⁽¹⁵⁾.

The place with the highest incidence of sexual violence against children and adolescents was the victim's residence. This data was corroborated by other studies^(12,15,24) and shows that the aggressor, in general, is someone who lives or visits frequently the victim's house.

The most common type of sexual violence was rape, followed by sexual harassment. Although the highest rate was that of non-recurrence of the act, there is a worrying share of recurrence, which may demonstrate flaws in safety and surveillance systems. This was also identified by other studies that showed similar results regarding the non-recurrence of cases^(12,15).

The most frequent reception and procedures performed by the health team after the occurrence of sexual violence was blood collection, and the most frequent referrals were to the Health Care Network, the Guardianship Council and the Children and Adolescents Precinct. It should be noted that adequate referrals are essential for resolute actions, aiming at comprehensive care for the health of children and adolescents and even greater care for these victims, in view of the complexity of possible results of sexual violence⁽²⁵⁾.

Data on the probable perpetrator of this violence show the prevalence of males, which is confirmed in other studies conducted with children and adolescents who have suffered sexual violence. A study carried out on reports of sexual violence in the age group from 0 to 19 years in Petrolina, PE pointed out that, of 1,232 reported cases, the aggressor was male in 97.3% of them⁽¹²⁾. This prevalence is also indicated in another study conducted in Teresina, PI⁽²⁴⁾.

Regarding the bond with the child or adolescent, the main aggressors identified were friend/acquaintance, followed by father, boyfriend, and stepfather. Similar studies also show that in most cases studied, the aggressor is identified as belonging to the intrafamilial group^(24,26,27), a determining fact in the difficulty

of the child and adolescent to expose the events.

In relation to the aggressors' age, the age groups between 10 and 19 years, from 20 to 24 years, and from 25 to 59 years were evident, that is, adolescents and adults stood out. In searches in the literature, we identified that the violence practiced with male children, most of the time, had a male adolescent as aggressor; on the other hand, when related to girls, most cases of violence occurred between their 10 to 14 years, and the aggressor was a male adult⁽²⁸⁾. In addition, we highlight the difficulty in finding current studies that discuss the age groups of the probable perpetrator of violence⁽¹³⁾.

As for the spatial distribution of cases, as not all forms had complete addresses, only 61 could be analyzed, which means that 100% of cases with complete addresses were georeferenced and, from these, the analysis in relation to the spatial distribution was made. This reinforces the importance of training professionals for the correct completion of notification forms as indicated in the manuscript.

Among the cases analyzed, most events reported in this study occurred in the city outskirts, places that have these main characteristics: a large concentration of population, precarious housing conditions and irregular occupations, and lack of basic and social services, especially health and sanitation, being considered regions of social deprivation. An international study carried out in 2016, which aimed to examine the effects of geographical and economic factors on estimates of child maltreatment worldwide, identified South America with the highest estimates among all continents⁽²⁹⁾.

Greater occurrences of sexual violence in peripheral regions were also mentioned in studies, such as the one carried out in Santarém, PA in which it is indicated that 60% of occurrences of violence took place in peripheral regions⁽³⁰⁾. Also, the global data presented in another study showed that more than 93% of cases occurred in peripheral areas of the analyzed municipality⁽¹²⁾. In an analysis of the spatial distribution in research in the state of Bahia, a greater number of cases were found in more developed regions, justified because these were places with greater access to specialized care services, when compared to those less

developed⁽²²⁾, a fact that may be related to the lack or underreporting of cases coming from the rural area of the municipality under study, due to the distance from the places of access.

In the case of Santa Maria, peripheral expansion has been happening rapidly, concomitant with the lack of public policies to serve the population that often has low purchasing power⁽³¹⁾. This discourse shows us how the reach of care and notification services are important in the process of early identification and fight against violence.

The study limitations refer to the quality of completion and the lack of information in notification forms. The incompleteness of this information, especially the addresses, made spatial analysis difficult and limited identification of the most vulnerable points to improve actions and reduce violence against children.

CONCLUSION

The characterization of cases showed the predominance of males as the perpetrators of violence and highlighted the friend/acquaintance as the main type of bond with the victim. The victims are characterized as predominantly

children (0 to 9 years) and female. Rape was the main type of violence practiced and the place of prevalence of this occurrence was the victim's house. The main procedures performed were blood collections and HIV/STI tests, with most referrals to the Health Care Network and the Guardianship Council.

We concluded that the spatial distribution pattern of sexual violence against children and adolescents in the city of study in southern Brazil exposed a higher density in the urban area, located in the peripheral regions, which are areas of social and economic deprivation.

The need to improve the completion of notification forms was evidenced, based on a qualification of the responsible professionals, since, through them, it is possible to identify the most vulnerable places for the development of specific actions. We suggest the development of health education in schools and the implementation of public policies, such as the Health at School Program (*Programa Saúde na Escola*), aimed at combating and preventing sexual violence in the city regions identified as most vulnerable.

DISTRIBUIÇÃO ESPACIAL E CARACTERIZAÇÃO DE CASOS DE VIOLÊNCIA SEXUAL CONTRA CRIANÇAS E ADOLESCENTES NO SUL DO BRASIL

RESUMO

Objetivo: caracterizar a violência sexual sofrida por crianças e adolescentes de um município do sul do Brasil e identificar o seu padrão de distribuição espacial. **Método:** trata-se de um estudo ecológico transversal, com caráter quantitativo a partir de dados disponíveis no setor de Vigilância Epidemiológica do município do estudo dos anos de 2018 e 2019. A coleta de dados ocorreu em novembro de 2020. A análise foi realizada por meio do programa Q-GIS® versão 2.18 e o uso da técnica de Kernel. O trabalho foi aprovado pelo Comitê de Ética e Pesquisa da instituição. **Resultados:** foram analisados 137 registros de violência sexual. As ocorrências foram mais prevalentes no sexo feminino (83,9%) de cor branca (74,4%) e nas faixas etárias de 5 a 9 (25,5%) e de 10 a 14 anos (40,8%). Ocorreu principalmente na área urbana da cidade (62,04%) concentrando-se na região periférica e na residência da pessoa agredida (65,6%). O principal agressor foi do sexo masculino (91,9%). A distribuição espacial concentrou-se com uma maior densidade de casos notificados nas regiões administrativas Norte, Oeste e Centro-Leste do município. **Conclusão:** o principal tipo de violência foi o estupro contra crianças e o padrão de distribuição espacial desses casos de violência apresentou uma densidade maior nas regiões periféricas caracterizadas como áreas de carência, privação social e econômica.

Palavras-chave: Criança. Adolescente. Violência sexual. Estudos ecológicos.

DISTRIBUCIÓN ESPACIAL Y CARACTERIZACIÓN DE CASOS DE VIOLENCIA SEXUAL CONTRA NIÑOS Y ADOLESCENTES EN EL SUR DE BRASIL

RESUMEN

Objetivo: caracterizar la violencia sexual sufrida por niños y adolescentes de un municipio del sur de Brasil e identificar su patrón de distribución espacial. **Método:** se trata de un estudio ecológico transversal, con carácter cuantitativo a partir de datos disponibles en el sector de Vigilancia Epidemiológica del municipio del estudio de

los años 2018 y 2019. La recolección de datos ocurrió en noviembre de 2020. El análisis fue realizado mediante el programa Q-GIS® versión 2.18 y el uso de la técnica del Kernel. El trabajo fue aprobado por el Comité de Ética e Investigación de la institución. **Resultados:** se analizaron 137 registros de violencia sexual. Las ocurrencias fueron más prevalentes en el sexo femenino (83,9%) de color blanco (74,4%) y en las franjas etarias de 5 a 9 (25,5%) y de 10 a 14 años (40,8%). Ocurrió principalmente en el área urbana de la ciudad (62,04%) concentrándose en la región periférica y en la residencia de la persona agredida (65,6%). El principal agresor fue masculino (91,9%). La distribución espacial se concentró con una mayor densidad de casos notificados en las regiones administrativas Norte, Oeste y Centro-Este del municipio. **Conclusión:** el principal tipo de violencia fue la violación contra niños y el patrón de distribución espacial de esos casos de violencia presentó una densidad mayor en las regiones periféricas caracterizadas como áreas de carencia, privación social y económica.

Palabras clave: Niño. Adolescente. Violencia sexual. Estudios ecológicos.

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