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Sexual violence against children: authors, victims and consequences

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Abstract *The scope of this study was to identify the characteristics of sexual abuse against children including the profiles of the victims and the perpetrators, and associated factors notified in a health service of reference with the database of the Brazilian Case Registry Database, in a city in the south of Brazil. Categorical variables are presented in prevalence with 95% confidence intervals. There were 489 notifications from 2008 to 2014 of confirmed or suspected child sexual abuse. The majority was related to female victims, but the repeated abuse was reported mainly with male victims. In most cases, the abuse took place at the victims' or perpetrators' homes and the main perpetrators of abuse were male and acquainted with the victims. Twelve victims have contracted sexually transmitted infections; pregnancies were six, five of them legally terminated. This study highlights that the child sexual abuse profiles were similar in almost all of Brazilian regions, showing that it is possible to have a coordinated national action to prevent this offence.*

Key words *Sexual violence, Children*

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Introduction

According to the World Health Organization (WHO), every child has the right to violence-free health and life. Children Sexual Abuse (CSA) occurs when children are subjected to a sexual activity that they cannot understand, with which they have an incompatible development, cannot consent and/or that violates society laws or rules[1].

Although the results clearly show that CSA experience is highly prevalent in all societies investigated, a meta-analysis with international studies has estimated an average CSA prevalence of 20.0% for women and 8.0% for men[2]. Rate variations are probably due to different definitions of CSA in terms of age and methodological gaps between studies[3]. In Nordic countries, rates ranged from 14.0% for women and 7.0% for men in Denmark; 2.4%-9.3% for women and 0.7%-4.6% for men in Finland; in Sweden, the overall prevalence ranged from 2.0% to 11.0%, and Norway reported a prevalence of 10.0%[4].

Brazilian studies[5-8] show that most cases of sexual abuse occur in girls aged 5-10 years. Boys also suffer abuse, but to a lesser degree, especially when it is intrafamiliar[1]. In 2005, a study carried out in the state of Santa Catarina (SC) with data obtained from records of notifications from the Guardianship Council and Sentinel Program of the city of Itajaí from 1999 to 2003 showed that a large part of the children and adolescent sexual violence occurred within homes, and the father was the main perpetrator[8]. O PAI FOI O MAIOR RESPONSAVEL POR ESSES ABUSOS

CSA is an important risk factor for several health problems in childhood and in adult life[1,9-10] that have a great impact on the physical and mainly psychological health of victims. It is also a substantial burden to the health system (medical consultations and hospitalizations)[1,10-18].

Estimating the prevalence of CSA is crucial to determine the extent of the problem and possible interventions, and the organization of reporting of this problem is instrumental to comprehensive care for people in situations of violence[19]. Due to the relatively recent inclusion of sexual violence data in the Notifiable Disease Information System (SINAN) (2008) as a means of universalizing continuous surveillance, using it systematically is the best way to evaluate it and improve it.

This study aimed to identify characteristics of child sexual abuse, such as the profile of the victim and the perpetrator of abuse and factors associated with sexual violence, reported in a referral service, using SINAN records.

Methods

This is a cross-sectional, descriptive and analytical study with secondary data from SINAN. All suspected or confirmed children sexual abuse cases, from January 2008 to December 2014, reported by a pediatric hospital in Florianópolis, Santa Catarina were analyzed.

The place where this research was developed is a regional child and adolescent care reference for CSA victims since 2000 and is part of the "Protocol of Care to Victims of Sexual Violence of the Municipality of Florianópolis". It provides data to SINAN with notifications of any suspected or confirmed cases of domestic violence, sexual violence and/or other violence against children and adolescents, in accordance with the instructions in the notification form.

The information of interest in this study was retrieved from the registration form completed by the professional responsible for the service. The variables described were categorized according to the Ministry of Health's "Instructions for reporting domestic violence, sexual violence and other violence"[19], in data related to the victim, the occurrence, type of sexual violence, consequences, probable perpetrator, referrals and procedures performed with the victims.

Regarding the victim, the following data were considered: age, ethnicity or skin color, disability or disorder and place of residence. Age was recorded in full years at the time of notification and categorized, according to Marcondes et al.[20], in the following age groups: 0-2 years (exclusive), 3-6 years (exclusive), 6-10 years (exclusive) and 10-15 years (exclusive). Ethnicity or skin color followed the self-reference of victim/informant according to the options used in the 2010 Census of the Brazilian Institute of Geography and Statistics (IBGE), namely, white, black, yellow, brown or indigenous[21]. Disabilities or disorders were classified into visual, hearing, mental, physical and behavioral. They were grouped and generated the variable "disability", which was dichotomized into "present" or "absent". The place of residence considered the municipality and its respective Federative Unit (UF)[22].

Regarding the occurrence, the following data were investigated: municipality and respective UF; urban situation (urban, rural or peri-urban); nature of the place where the abuse occurred (residence, collective housing, school, place of sports practice, bar or similar, public highway, trade or services, industries or construction); and number of times the victim was abused (catego-

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rized as "once" or "twice and over"). The places of residence and collective housing, which according to instructions, for the pediatric age group, includes shack (workers' camp), student house (republic), barracks, psychiatric hospital (when used as housing by the person receiving treatment/victim), host institution (shelter), colony hospitals, hostel, socioeducational unit, shelter unit, hostel; they were grouped and generated the variable "residence" and the other places were grouped under the variable "any other place".

Sexual violence was defined in terms of the presence or absence of sexual harassment, indecent assault and rape.

The occurrence or not of penetration was also analyzed. If it occurred, we established the type: anal, oral or vaginal. Even if Brazilian Federal Law Nº 12.015 of 2009[23,24] merges under a single item the crimes of rape and indecent assault, we decided to analyze the two concepts separately and jointly, since the record kept the categorization unchanged until 2015. The aforementioned legislation defined Indecent Assault as "to constrain people through violence or serious threat to practice or allow to practice with them a libidinous act other than the carnal conjunction", whereas rape is defined as "constraining women toward carnal conjunction through violence or serious threat".

The procedures indicated at the time of notification were listed, according to the need to perform prophylaxis for sexually transmitted infections (STIs), human immunodeficiency virus (HIV), Hepatitis B or Tetanus. The need to collect blood, semen, vaginal secretion and emergency contraception or legal abortion was described. The presence of abortion, pregnancy, STI, attempted suicide, mental or behavioral disorder and Posttraumatic Stress Disorder (PTSD) were investigated as to the consequences of the occurrence detected at the time of notification.

The likely perpetrator of sexual violence was identified regarding gender, number of involved, suspected use of alcohol (if yes or no) and relationship/degree of kinship with the victim (father, mother, stepfather, stepmother, spouse, former spouse, boyfriend, former boyfriend, brother, friend, caregiver, stranger, person in institutional relationship or others). This last variable was analyzed separately and in a grouped form, generating the variable "acquaintance". In this group, "to be a victim's acquaintance" consisted of "perpetrators": father, mother, stepfather, stepmother, spouse, former spouse, boyfriend, former boyfriend, brother, friend, caregiver, friend, person in institutional relationship and others.

Victim referral place was also investigated: Guardianship Council, Childhood and Youth Court, Shelter, Sentinel Program, Child and Adolescent Protection Police Department, Public Prosecutor's Office or Institute of Forensic Medicine (IFM).

Data obtained were exported from SINAN in the EXCELÒ format, evaluated separately by three observers and, in case of any issue or disagreement, were verified back in the notification form. These data were then analyzed using statistical software Stata 11.0.

Category variables are shown with prevalence and respective 95% confidence intervals (CI: 95%). The chi-square test was performed to determine the gaps of several variables between genders.

The Human Research Ethics Committee of the Joana de Gusmão Children's Hospital approved the project of this study under Consolidated Opinion Nº 922.978. The human research ethics principles found in the resolutions of the National Health Council were respected.

Results

From January 2008 to December 2014, 490 suspected or confirmed cases of CSA were reported. A notification was duplicated and was excluded. Ten cases had two notifications on different dates and one had three separate notifications. Thus, the final sample consisted of 477 children and adolescents.

The distribution of the number of notifications over seven years is shown in Figure 1.

Most victims were female (75.5%), white (78.0%) and had no disability (94.5%). One notification corresponded to an indigenous victim. The most affected female age group was 10-15 years (41.2%) and 2-6 years (42.5%) for males. When the sample was stratified in children and adolescents, according to the Statute of the Child and Adolescent (ECA), CSA prevalence was more frequently observed in children under 12 years of age (67.7%) (Table 1).

Among the municipalities of occurrence, Florianópolis had the highest number of notifications, with 57.9% of cases. The urban area was the most cited area (98.5%), and the victim's or perpetrator's residence was the most frequent place of abuse (81.6%) in both genders. Victims came from 25 different municipalities of Santa Catarina and two municipalities of Rio Grande do Sul.

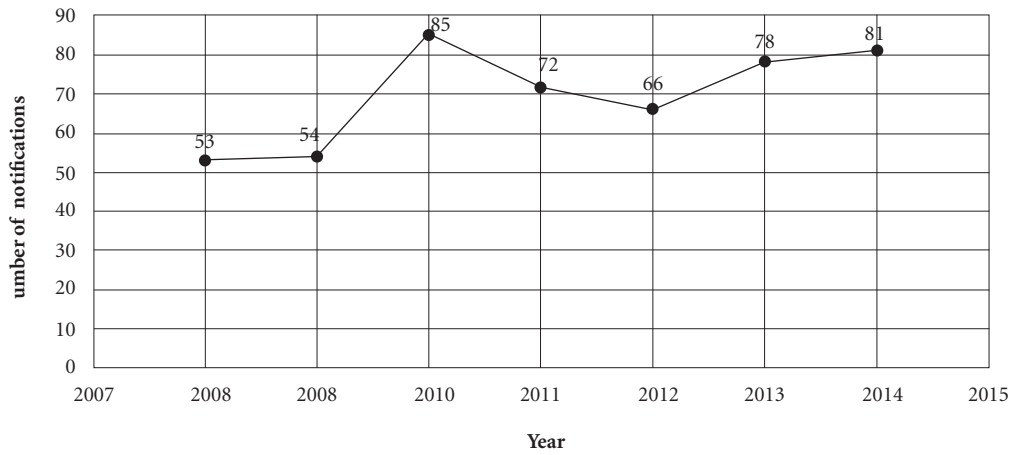

Figure 1. Number of CSA notifications/year (n = 489) of HIJG (SINAN), SC, 2008 – 2014.

Note: CSA: children sexual abuse. HIJG: Joana de Gusmão Children's Hospital. SINAN: Notifiable Disease Information System.

Regarding characteristics of CSA perpetrators, 66.5% (95% CI: 62.3-70.7) were acquaintances of the victims; predominantly males 91.9% (95% CI 89.3-94.4); had not consumed alcohol during the abuse 68.6% (95% CI 63.1-74.0); and acted alone 85.2% (95% CI, 81.9-88.6). The variable "victim acquaintance" appeared more frequently as a perpetrator in both genders (Table 2).

As shown in Table 3, we decided to analyze the types of abuse separately, as described in the notification form, and jointly, in accordance with current legislation[23]. Indecent assault was the most observed abuse among male victims, while rape was more than three times more frequent in females. When associated with the types of violence "indecent assault and rape", now categorized as "rape" according to the current legal definition, we observed that it was twice as frequent among female victims. When abuse was followed by anal or oral penetration, male victims were the most affected. Vaginal penetration occurred in 59% of the cases (95% CI, 52.4-65.6).

Regarding the procedures performed, referred to at the time of notification, we observed that most of the victims did not perform prophylaxis for STI (71.7%), HIV (72.9%) or Hepatitis B (78.6%). There was no semen collection in 89.2% of cases and vaginal secretion in 75.4%. In the analyzed period, five adolescents (3.5%, 95% CI 0.4-6.5) were referred for legal termination of pregnancy and 48 (16.7%, 95% CI 93.5-99.6) made use of the medication used for emergency contraception. One case of pregnancy (1%) was carried to term, and twelve cases of STIs (3.4%) due to abuse were reported. When analyzed by gender, these data showed no statistically significant difference (Table 4).

Among the immediate consequences, the impact of CSA on the mental health of victims stands out, since four (1%) of these attempted suicide; five (1.3%) developed mental disorder; 90 (22.4%) evidenced behavioral disorders; and 77 (20.0%) had posttraumatic stress disorders. These changes were more prevalent in males and statistically significant in both genders.

The compulsory notification of any suspected or confirmed violence to guardianship councils occurred in 90.5% of the cases. Twenty cases (4.4%) were referred to the Child and Youth Court; 36 (7.9%) to the Sentinel Program; and 26 (5.7%) and 6 (1.3%), respectively, to the Protection Police Department and the Public Prosecutor's Office.

Seven children/adolescents (1.5%) were separated from their families and sent to a Shelter Home. The need for evaluation by an IFM expert physician occurred in 39.4% of notifications (183 cases).

Table 1. CSA Victim profile (n = 489), according to gender reported by the HIJG (SINAN) SC, 2008 – 2014.

Variables	Female		Male		p-value[a]
	n (%)	CI95%	n (%)	CI95%	
n	369 (100.0)	–	120 (100.0)	–	
Age†					
< 2 years	21(5.7)	3.3 – 8.1	9 (7.5)	2.7 – 12.3	<0.001
2|-- 6 years	115 (31.2)	26.5 – 26.3	51 (42.5)	33.5 – 51.5	
6 |--10 years	81 (21.9)	17.8 – 26.3	37 (30.8)	22.5 – 39.2	
10|-- 15 years	152 (41.2)	36.1 – 46.2	23 (19.2)	12.0 – 26.3	
ECA age					
Child	225 (69.1)	64.6 – 74.0	106 (88.3)	82.5 – 94.2	<0.001
Adolescent	114 (30.9)	26.2 – 35.6	14 (11.7)	5.8 – 17.5	
Skin color/Ethnicity*					
White	251 (77.5)	72.9 – 82.0	82 (79.6)	71.7 – 87.5	NA
Black	27 (8.3)	5.3 – 11.4	9(8.7)	3.2 – 14.3	
Yellow	1 (0.3)	0.0 – 0.9	1 (1.0)	0.0 – 2.9	
Brown	44 (13.6)	9.8 – 17.8	11 (10.7)	4.6 – 16.7	
Indigenous	1 (0.3)	0.0 – 0.9	–	–	
Disability					
No	349 (94.6)	92.3 – 96.9	113 (94.2)	89.9 – 98.4	0.863
Yes	20 (5.4)	3.1 – 7.7	7 (5.8)	1.6 – 10.1	
Number of occurrences*					
Once	137 (51.3)	45.3 – 57.3	33 (41.3)	30.2 – 52.3	0.114
2 or more	130 (48.7)	42.7 – 54.7	47 (58.8)	47.7 – 69.8	

CI95% = confidence interval of 95%; [a] Chi square test; *Data without information from all records; NA: not applicable.
† Stratification according to Marcondes. ECA: Children and Adolescent Statute. CSA: children sexual abuse. HIJG: Joana de Gusmão Children's Hospital. SINAN: Notifiable Disease Information System.

Table 2. CSA perpetrator's profile (n = 444), according victim gender, reported by the HIJG (SINAN), SC, 2008 – 2014.

Variables	Female		Male		p-value[a]
	n (%)	CI95%	n (%)	CI95%	
n	369(100.0)	–	120(100.0)	–	
Gender*					
Male	313 (92.8)	90.1 -95.6	95(88.8)	83.9 -95.6	0.382
Female	13 (3.9)	1.8 - 5.9	8 (7.5)	1.8 - 11.3	
Both	11 (3.3)	1.4 - 5.2	4 (3.7)	0.1 - 7.4	
Known to victim					
Yes	233 (63.1)	58.2 -68.1	92 (76.7)	69.0 -84.3	0.006
No	136 (36.9)	31.9 -41.8	28 (23.3)	15.7 -31.0	
Alcohol use by perpetrator*					
No	142 (66.1)	59.7 -72.4	52 (76.5)	66.1- 86.8	0.107
Yes	73 (34.0)	27.6 -40.3	16 (23.5)	13.2 -33.9	
Number of people involved*					
1	277 (85.0)	81.1 -88.9	92 (86.0)	79.3 -92.7	0.798
2 or more	49 (15.0)	11.1- 18.9	15 (14.0)	7.33 -20.7	

CI95% = confidence interval of 95%; [a] Chi square test; *Data without information from all records; NA: not applicable. CSA: children sexual abuse. HIJG: Joana de Gusmão Children's Hospital. SINAN: Notifiable Disease Information System.

Discussion

For the first time, a detailed evaluation of the data of the state of Santa Catarina on the subject was made, characterizing the profile of victims and their perpetrators.

With data collected in an environment where notifications and victim care occurred simultaneously, it was possible to check the information in medical records, clarify filling issues, eliminate duplicity and perform inferential and association analyses.

Although the Notification Form was not updated in 2009 – when Brazilian legislation changed the concept of abuse classification – it was possible to evaluate the types of abuse in order to consider both old and current concepts in this study.

In Brazil, the phenomenon of violence has mobilized different areas of knowledge to establish partnerships that seek to promote prevention and intervention strategies in addressing the problem[25]. This practice aims to ensure compliance with principles legally assured in the ECA regarding policies and programs aimed at social and interpersonal violence against children and adolescents[1,3].

In this country, since 1997, a social reporting tool called *Disque Denúncia*, popularly known as *Disque 100*[26] is available to people.

It was observed that, although the violence module was entered in SINAN in 2008, the number of notifications remained stable until 2010. The implementation of personnel training policies in the area of violence and dissemination of the electronic tool may have given greater visibility to it or its best use, or both, thus reflecting increased notifications.

The prevalence of reports in females corroborates with literature, which points to a higher frequency of CSA in girls[7,27-29].

As in previous studies, this study showed that the association of age and gender evidences a tendency for boys to be abused at earlier ages[7,9], possibly because they do not have the physical development to offer resistance[30-32]. On the other hand, girls suffer abuse later in life[33-35], which was also observed in this study.

Table 3. CSA cases typology (n = 444), according to victim gender, reported by the HIJG (SINAN), SC, 2008 – 2014.

Variables	Female		Male		p-value[a]
	n (%)	CI95%	n (%)	CI95%	
n	369 (100.0)	–	120(100.0)	–	
Sexual harassment*					0.003
Yes	129 (42.6)	37.0 - 48.2	26 (25.7)	17.1 - 34.4	
No	174 (57.4)	51.8 - 63.0	75 (74.3)	65.6 - 82.9	
Rape†					
Yes	232 (62.9)	57.9 - 67.8	34 (28.3)	20.2 - 36.5	0.079
No	137 (37.1)	32.2 - 42.1	86 (71.7)	63.5 - 79.8	
Penetration*					
Yes	115 (56.1)	49.2 - 62.9	58 (72.5)	62.5 - 82.5	0.011
No	90 (43.9)	37.1 - 50.8	22 (27.5)	17.5 - 37.5	
Penetration Type*					
Anal					<0.001
Yes	38 (16.4)	11.8 - 21.6	55 (69.2)	59.3 – 80.0	
No	189 (83.3)	78.7 - 88.4	24 (30.4)	20.0 - 40.7	
Oral					0.012
Yes	19 (8.8)	5.0 - 12.5	14 (19.7)	10.2 - 29.2	
No	198 (91.2)	87.5 - 95.0	57 (80.3)	70.8 - 89.8	
Vaginal					
Yes	128 (59.0)	52.4 - 65.6	NA	-	
No	89 (41.0)	34.4 - 47.6			

CI95% = confidence interval of 95%; [a]Chi square test; *Data without information from all records; NA: not applicable.
† Association of Indecent Assault and Rape. CSA: children sexual abuse. HIJG: Joana de Gusmão Children's Hospital. SINAN: Notifiable Disease Information System.

Table 4. Description of the procedures performed (n = 435), according to victim gender, reported by the HIJG (SINAN), SC, 2008 – 2014.

Variables	Female		Male		p-value[a]
	n (%)	CI95%	n (%)	CI95%	
n	369 (100.0)	–	120(100.0)	–	
STI Prophylaxis *					**0.069**
Yes	99 (30.7)	25.6 - 35.7	24 (21.6)	13.8 - 29.4	
No	224 (69.6)	64.3 - 74.4	87 (78.4)	70.6 - 86.2	
HIV Prophylaxis*					**0.116**
Yes	94 (29.1)	24.1- 34.1	24 (21.4)	13.7 - 29.1	
No	229 (70.9)	65.9 - 75.9	88 (78.6)	70.9 - 86.3	
HBV Prophylaxis*					**0.318**
Yes	71 (22.5)	17.9 - 27.2	20 (18.0)	10.8 - 25.3	
No	244 (77.5)	72.8 - 82.1	91 (82.0)	74.7 -89.2	
Blood collection*					**0.069**
Yes	167 (52.5)	47.0 - 58.0	49 (42.6)	33.4 - 51.8	
No	151 (47.5)	42.0 - 53.0	66 (57.4)	48.2 - 66.6	
Collection of semen*					**0.901**
Yes	33 (10.7)	7.2 - 14.1	12 (11.1)	5.1 - 17.1	
No	276 (89.3)	85.6 - 92.8	96 (88.9)	82.9 - 94.9	
Collection of vaginal secretion*					**NA**
Yes	70 (24.7)	19.6 - 29.7	NA	-	
No	214 (75.3)	70.3 - 80.4	NA		
Emergency contraception*					
Yes	48 (16.7)	12.3 – 21.0	NA	-	NA
No	240 (83.3)	79.0 - 87.7	NA		
Legal Abortion*					
Yes	5 (3.5)	0.4 - 6.5	NA	-	NA
No	138 (96.5)	93.5 - 99.6	NA		

CI95% = confidence interval of 95%; [a] Chi square test*Data without information from all records; NA: not applicable. STI: sexually transmitted infection. HIV: Human Immunodeficiency Virus. HBV: Hepatitis B virus. CSA: children sexual abuse. HIJG: Joana de Gusmão Children's Hospital. SINAN: Notifiable Disease Information System.

The fact that most of the notifications correspond to female victims may be partly justified by the underreporting of CSA in males, due to the prejudice that arises regarding sexual identity after the boy is abused[7].

A question debated by Araújo that also justifies the greatest number of female cases is because CSA involves two basic inequalities, namely, gender and generation. In the author's case reports, gender and the economic factor were prominent issues: *Male domination and female submission are crystallized and naturalize the production and repetition of abusive behaviors by the man holding the power of father, the material provider and head of the family. By placing themselves in the condition of inferiority, women themselves delegate powers to their husbands, companions and fathers. And this is where they reproduce abusive behavior*[36].

The highest occurrence of abuse occurred among children under 12 years of age (67.7%). In a meta-analysis conducted by WHO, it was observed that the age of the abuse event varied considerably between the 22 studies; however, its onset was consistently more prevalent at the age range of 5-14 years for both males and females[3]. Aded et al.[30] inferred that, for victims in a higher age group, there could be some difficulty in reporting complaints of sexual abuse due to the possible embarrassment and family and social repercussions[35]. In some societies, the practice of sexual activity at ages greater than twelve years may not be considered abuse[35].

People with physical or mental disabilities are more at risk and more vulnerable to violence of all kinds, including sexual violence[35]. Although no significant difference was evidenced by the

chi-square test, we found that 27 victims (5.5%) had some disability, whether physical or mental, disorder or syndrome. A hypothesis considers that the physical/mental limitation itself is a determinant of the low reporting rate due to its high degree of physical and sensorial dependence, and because the clinical signs and symptoms of abuse are often ignored because they are considered a result of the main disease[37].

The population of the southern region of the country is predominantly white[21,38] and therefore most of the victims are expected to be white, corroborating with a study carried out in Rio Grande do Sul[39] and differing from the survey conducted by Silva et al., in Recife, where most victims were brown[34]. The low prevalence of indigenous race in the study, one case of an indigenous girl residing in the municipality of José Boiteux, where there is an indigenous reserve, was also observed by Zanatta et al.[39].

The highest number of CSA notifications in the urban population of this study can be attributed to the greater population concentration in this area or to rural communities' difficult access to the reference sites[40]. It may also stem from cultural issues typical of rural areas that hinder the disclosure of abuse[37,41]. Of these features, while not exclusive to the rural population, we can mention the tendency to value family life privacy, or even the reproduction of a family culture of violence and sexual abuse that are protected by the law of silence[36]. There is also the possibility of non-confrontation with parents' discourse to avoid intra-family conflict[41].

CSA records in other municipalities besides Florianópolis is because the hospital where the notifications were made is a regional reference in the pediatric services. It is worth noting that small municipalities have referred victims to this hospital without prior notification in the health facility of their city. The possible fear of the professional who made the diagnosis suffering community or victims' parents retaliation arises[40]. Gonçalves and Ferreira do not point this as a relevant factor for non-notification. These authors argue that threats of perpetrators to relatives who try to seek the health sector are of greater impact[42]. The family may also be fearful in seeking help in services from their place of residence because it is a health problem that generates prejudice and stigmatization[37]. This shows how important it is to ensure information confidentiality by the entire team of professionals attending these victims[35].

Other justifications for the large number of notifications in Florianópolis is due to the fact that this municipality is more populous[43], has a more organized health care network and with a protocol to service people in situations of sexual violence implanted 15 years ago[44].

Worth mentioning are cases that occurred in other federative units and notified in Florianópolis. It is known that in some situations children and adolescents are sent to live with relatives when abuse is discovered or the family moves to another location. Only after the change of environment does the disclosure of abuse occur[45].

The home of the victim or the perpetrator as the predominant place of abuse agrees with literature[7,27,29,32,45], which alerts us to the realization that the traditional "private barrier" between domestic and public spheres has inhibited the development of policies and legal devices to prevent domestic violence and provide services to those affected by it[1,42]. Pfeiffer and Salvagni[37] says this phenomenon is concealed by secrecy, the "wall of silence", which includes family members, neighbors and sometimes professionals who provide care to children who are victims of violence.

Results from national and international studies indicate that the main perpetrator of the abuse is known to victims and their families[7,27,28,45]. This was also evidenced in this study, emphasizing that the perpetrator of the abuse had close relationships with its victims.

In 2006, in the U.S., in confirmed cases, 26.0% of CSA perpetrators were parents[46]. In Switzerland, in 2013, Maier et al.[28] identified the father as the most frequent culprit. These authors said children are more often threatened and victimized by members of their own family, in the following decreasing order of incidence: parents, siblings, mothers and other caregivers.

In this study, the father as the perpetrator of the abuse occurred in 17.5% of the cases. A prevalence of 21.7% of the father being the culprit of the abuse was found by Drezett et al.[45] and Baptista et al.[46] pointed out the abuser's bond with the victim in the following order: father, stepfather, uncle, grandfather, cousin. Gawryszewski et al.[7], in São Paulo, found that, in 43.8% of cases, those responsible for the victims were the perpetrators of the abuse.

Most of the abusers were male, a result similar to several surveys[7,29,32,36]. In this study, female authors victimized both genders, with a rate of 4.7%, unlike that observed by Cartón Duarte et al.[27], in which female perpetrators only made victims of the same gender. The prevalence of female authorship found by Maier et al.[28] was 4.5%, and 2.1% by Martins and Melo Jorge[32]. Ac-

cording to Linsay et al.[47], CSA female authors had higher rates of prior child abuse.

Usually, the perpetrator acts alone. The prevalence of more than one person in the crime of abuse occurred in 14.8% in this study, similar to that described by Drezett et al.[45], which was 10.0%.

Regarding the type of abuse, if the definition of indecent assault that existed prior to the amendment of the 2009 legislation was used, the prevalence of 40.7% is observed, similar to that described by Maier et al.[28], in which abuse without contact or with contact but without penetration had a prevalence ranging from 36% and 42%. In the study by Cartón Duarte et al[27], this rate was 63.0%.

In 2009, Gilbert et al.[48] reported that, during childhood, 5-10% of girls and 5.0% of boys are exposed to CSA with penetration. Mohler-Kuo et al.[29] reported a prevalence of 2.5% of CSA with contact and penetration in female victims, and 0.6% in males. This prevalence is much lower and contrary to that found in this study where, of the 285 cases evaluated in this issue, 56.1% of female victims and 72.5% of male victims had some type of penetration.

This discrepancy may be due to the fact that the study was carried out in Switzerland and the design of this study - population-based studies and case studies produce quite different results, and due attention should be paid to existing methodological gaps. Thus, as Collin-Vézina et al.[49] warn, the results of studies in this area cannot be extrapolated to the other countries without considering the gaps between cultures and social contexts.

STIs and pregnancy prophylaxis is indicated in cases in which the victim arrives at the service until 72 hours after the abuse and there is contact with secretions[42]. Diagnostic serological tests before prophylaxis are recommended internationally[3] because they allow the identification of STIs mainly in children under 10 years of age. It should be noted that, in developed countries, reliable rapid tests are available through polymerase chain reaction (PCR), not routinely advocated in Brazil, which may explain the low prophylaxis rates in this study[41].

The routine of the consultations carried out in the analyzed cases followed the Protocol of the Network of Comprehensive Care to People in Situation of Sexual Violence (RAIVS). This protocol uses serological tests to investigate infectious diseases. Because the results of these tests are not immediate, when treated within the first 72 hours and given an indication of drug use, victims receive antibiotics for bacterial STIs prophylaxis and two antiretroviral medications, in addition to emergency contraception[43]. The cases of non-accomplishment of drug prophylaxis may correspond to the failure to comply with what is recommended in the RAIVS Protocol, since many cases were only suspected, there was no contact with secretion and the notification occurred after 72 hours.

The procedures recommended for the prophylaxis of Hepatitis B were less successful when compared to those of STIs and HIV. This can be attributed to the possibility of the victim having the complete vaccination scheme, checked in the child or adolescent health booklet during care. As the number of treatment to female victims was proportionally higher than male victims, the highest number of procedures occurred for females, although statistical differences were not significant.

The compulsory referral to protective institutions, such as the Guardianship Council seen by Gawryszewski et al.[7], was 70.7%. Despite the obligation to notify any suspected or confirmed cases of violence to the guardianship councils since 1990[50], we note that it did not occur in its entirety.

Flahertye et al.[51] report that some pediatricians are reluctant to involve protection agencies, even if there is a strong indication of abuse. These authors cite as reasons for this reluctance the distrust in these agencies, the fear that the child will be withdrawn from the family life, implying a double effect situation, since it creates another harm[52], as well as the belief that they can solve the whole problem alone[49]. It is observed that when the abuse is revealed, the family system can be undone, with the possibility of children being removed from their own homes[14]. In this study, this situation was seen in seven cases, less than reported by Pereda et al.[2] in their publication in 2006.

Shocking issues like CSA cause numerous sequels with lifelong repercussion. The SINAN Notification Form allowed the evaluation of some of them. In the seven- year period covered by this study, pregnancy rates, legal abortion and STIs were respectively 1.0%, 3.5% and 3.4%. According to the American Academy of Pediatrics[53], approximately 5.0% of sexually abused children contract an STI from their victimizers. Hillis et al.[54] noted the small to moderate effects of CSA on increasing rates of adolescent pregnancy, abortion and the risk of contracting STIs.

The suicide attempt observed in this study is different from that found in the population-based cohort of Fergusson et al.[9] in New Zealand, which showed a prevalence of suicide attempts of 11.0-21.0% in young adults and adolescents who experienced severe physical violence and penetrative sexual abuse, against 1.0-3.0% of controls. It is possible to presume that, if follow-up data on victims were available, the repercussion could be better evaluated by a specialized professional and the prevalence would be higher.

Cummings et al.[14] found a prevalence of PTSD ranging from 37.0% to 53.0% among abused children; Chen et al.[11] found a prevalence of 23.0% in pre-adolescent victims. In the data collection tool used is the alternative of PTSD, which appeared in this study in 20.0% of the cases. This data can be analyzed critically, since in order to establish the PTSD diagnosis, some requirements are necessary, such as a minimum time of symptoms of three months[55], which is impossible in cases of acute CSA, with less than 72 hours of development. Another suggestion to the "PTSD consequence" in the record would be the presence of the Acute Stress Disorder option.

The potential limitations of this study may be those related to the use of secondary data, minimized by the verification of their veracity in the medical records of the victims who underwent the institution's follow-up. Underreporting, which can be attributed both to the family's denial of seeking help and by simulating other situations to justify the injuries of the victims, which is not always identified as sexual abuse by the care provider[30].

Some CSA-relevant indicators were not included in the analysis because they used a nationally standardized record for reporting cases of sexual violence with pre-determined data.

It is fundamental to make SINAN's filling instructions more accessible, since when analyzing the database, we asked whether the person who filled the database was aware of the definitions, and incomplete filling compromises the analysis of some variables[12]. It is important to carry out more frequent multidisciplinary trainings on CSA and on the reporting tool in all regions of the state and to actively search for notified cases that do not return to outpatient follow-up[56].

When faced with situations of violence against children, professionals mobilize emotions and feelings that do not always allow rational decision-making, a fact that may hamper the proper completion of the notification form. The importance of multidisciplinary and inter-sectoral work that involves integrated actions of care and health care, punishment of perpetrators and protection of children and families subjected to situations of violence and sexual abuse are highlighted[36].

It is also necessary to think that the incomplete filling can occur from the place where it is usually performed: emergency room of public hospitals, with great demand for patients, long queues and the time required for its completion.

Conclusions

In the 7-year period analyzed, of the 489 CSA reports, 369 corresponded to female victims and 120 male victims. The most affected age group was 10-15 years in girls and 2-6 years in boys. Residence was the most frequent place of abuse and perpetrators were mostly men, who in 66.5% of the cases were known to the victims. Recurrent abuse was more frequent in male victims. In 3.5% of the cases, there was a legal interruption of gestation and 1.0% carried the pregnancy to term.

CSA's features were very similar to those of several places in Brazil, showing that national coordinated actions are possible to prevent this.

This is an extremely important issue in the social area, with great repercussion on the future lives of those involved, especially children, and therefore actions are urgently required to control this serious Brazilian Public Health problem.

Collaborations

VB Platt contributed substantially to the design, planning, data review and interpretation, elaboration of the preliminary version, paper's critical review and approval of the final version of the work. IC Back contributed to the design, data review and interpretation, critical review of content and approval of final version of the work. DB Hauschild contributed to the planning and data review and interpretation. JM Guedert contributed to data interpretation and critical review of content.

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