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Violence against children: an analysis of mandatory reporting of violence, Brazil 2011

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Abstract *This article aims to describe and analyze reporting of violence against children from 0 to 9 years of age, issued by the public health services, in Brazil. Data from the Violence and Accident Surveillance System (Viva-SINAN) were used. The frequency of selected variables was calculated by age group (0-1; 2-5 and 6-9 years of age) as well as their Prevalence Ratios (PR). 17.900 cases were reported: 33% in the 0-1 year group; 35,8% in the 2-5 year group; and 31,2% in the 6-9 year group. Physical violence predominated among boys (PR: 1.22; CI 95%: 1,16-1,28); 6-9 years old (PR: 1,19; CI 95%: 1,12-1.27). Sexual violence predominated among girls, mulatto/afro-descendant (PR: 1.12; CI 95 %: 1.06 to 1.19); 6-9 years (PR: 4.63; CI 95%: 4.22- 5.08) with more chances of occurring at home (PR: 1.38 , CI: 95%: 1.29-1.48); psychological violence prevailed among girls, mulatto/afro-descendant (PR: 1.10; CI 95 %: 1.03-1.18), 6-9 years old (PR: 2.95; CI 95%: 2.69- 3.23), at home (PR: 1.40; CI 95%: 1.29-1.53); negligence predominated among boys (PR: 1.33 ; 95% CI: 1.27-1.39); 0-1 years and their parents were the most prevalent perpetrators.The results indicate the need to strengthen intersectoral actions aiming at extending the social protection and care network.*

Key words *Domestic violence, Child abuse, Epidemiology, Reporting of violence*

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Introduction

Violence against children is a universal phenomenon; the World Health Organization (WHO) recognizes it as a public health concern worldwide, affecting millions of children, families and communities every year[1-6]. The inclusion of this topic in the health agenda, which started in the 60s and acquired momentum in the last two decades of the 20th century, has been gaining prominence vis-à-vis combating this problem[7]. In Brazil, the Child and Adolescent Statute[8] made a significant step forward by establishing children and adolescents as individuals entitled to rights and ensuring they are a top priority[9].

Nevertheless, its actual magnitude still poses a challenge because of the difficulty involved in determining the circumstances under which violence occurs due to a lack of uniformity and integration of records and conceptual differences in typologies[10,11]. Scherer and Scherer[11] refer to the insufficient training of professionals and to the need to integrate the various victim protection and assistance services.

Violence is a complex phenomenon; it cannot be explained based on a unilinear view of causality but as the result of a particular sociocultural and political context and dynamics signaled by established power relationships that deeply root and frame the social fabric to make the domination of the weaker by the stronger seem natural. The naturalization of violence and domination in relationships must be confronted and overcome[12].

The WHO defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation"[1]. The Brazilian Ministry of Health considers violence to be events caused by actions imposed on individuals, groups, social classes or countries that result in physical, emotional, moral and/or spiritual damage of oneself or others and differ from accidents, which are unintentional and avoidable[13] . Based on its nature, the WHO classifies violence as physical, psychological, sexual, neglect or abandonment[1].

Data from the Mortality Information System (*Sistema de Informação sobre Mortalidade* - SIM) from the Public Health System show that external factors were the main causes of death among children aged one to 10 years old in 2012, with large variations depending on ethnicity/skin color[14].

Some studies found a larger number of reported violence incidents involving girls [15-17], while others indicate a predominance of boys among victims[18,19]. According to Martins[17], the estimated global mortality rates by maltreatment are 2.2 cases per 100,000 girls and 1.8 cases per 100,000 boys. According to SIM data, the ratio of deaths by maltreatment among children zero to nine years old in 2012[14] was 1.41 times higher among boys compared to girls.

Even when violence does not leave physical scars, it causes mental and emotional suffering that results in deep traumas for life[1,20]. Several studies have indicated the use of physical violence as a method of child discipline as one of the reasons accounting for such violations of children's rights[6,17,19,21-23]. Violence against children is associated with the violence experienced by their parents in childhood[6], and domestic violence increases the odds of the affected children becoming homicide victims[24].

The Brazilian legislation is making steady progress to combat any form of abuse and to protect the rights of children. Article no. 227 of the 1988 Constitution[25] establishes the right to physical, mental and moral integrity, including the identity, autonomy, values, ideas and right to opine of children and adolescents. The Child Statute provides a significant framework for rights to be maintained. The recently approved *Menino Bernardo* Law[26] aims at changing the ethos of educational practices that transgress children's rights as citizens.

In 2006, the Ministry of Health established the Violence and Accidents Surveillance (*Vigilância de Violências e Acidentes* - Viva) system, which has two components: a) Survey-based surveillance, conducted at the entrance to emergency departments in selected counties, and b) Continuous surveillance, based on mandatory notification of domestic, sexual and other forms of interpersonal or self-inflicted violence[15]. Viva was initially implemented at maternity hospitals, services for sexually transmitted diseases and services for victims of violence and was then extended in 2009 to all healthcare facilities as part of the Notifiable Diseases Information System (*Sistema de Informação de Agravos de Notificação* - SINAN)[15]. Enactment of Rule no. 104[27], which makes the notification of all incidents involving interpersonal or self-provoked violence mandatory, strengthened the trend to broaden the scope of violence reporting . Accurate knowledge of violent events and their distribution across Brazil is relevant for the identification of the areas with

the greatest social vulnerabilities to guide the implementation of health actions able to improve the quality of life.

The aim of the present study was to analyze reported cases of violence against children aged up to nine years, 11 months and 29 days old at Brazilian public healthcare facilities.

Methods

The descriptive-analytical study was based on notified cases of violence against children aged zero to nine years old in Brazil from January 1 to December 31 2011. The database was created with data collected in the "Domestic, sexual and/or other forms of violence" notification form available at SINAN NET. All healthcare facilities, including reference centers for and outpatient clinics specialized in violence victims, among others, must notify all instances of violence. The corresponding data are processed in the information system by the municipal health secretaries of the corresponding counties and are then sent to state and federal agencies for entry into nationwide database.

The following variables were selected for assessment: (1) demographic characteristics of victims/assisted individuals (gender, age, ethnicity/skin color, presence of disabilities or disorders, area of residence); (2) event characteristics (whether it occurred at home, repeat violence, nature of the injury, affected body part); (3) type of violence; (4) perpetrator's characteristics (relationship to victim, suspected alcohol intake); and (5) progression and follow-up.

The association between the selected variables and the victims clustered by age range (zero to one, two to five, and six to nine years old) was investigated by means of the chi-square test (χ^2). Poisson regression was performed to calculate prevalence ratios (PRs) with 95% confidence intervals (CIs). The data were processed using Stata version 11 (StataCorp, College Station, TX, United States).

As the investigated intervention represents a continuous action of epidemiological surveillance instituted by the Ministry of Health across the country, informed consent was waived. Nevertheless, the anonymity and confidentiality of the information contained in the records was ensured to protect the identity of the individuals included in the analyzed database. The data were obtained from the Ministry of Health as anonymous, non-identifiable data .

Results

In 2011, VIVA/SINAN recorded 17,900 incidents of violence against children aged ≤ nine years old; 33% involved children aged zero to one year old; 35.8% children aged two to five years old; and 31.2% children aged six to nine years old. Cases involving girls were more frequently reported compared to boys both overall (54.3%) and per age range ($p < 0.001$). The percentages of cases involving white- or black/brown-skinned children were similar, while the percentage of cases involving Asian/indigenous children was 1.6%. The largest proportions of cases corresponded to age range zero to one year old among white children (51.8%) and to age range six to nine years old among black/brown children (52.6%; $p < 0.001$). Disabled children were involved in 5.1% of the incidents. Most cases occurred in Southeastern Brazil (42.9%), and the fewest cases occurred in Northern Brazil (8.2%) (Table 1).

Relative to their characteristics, 73.6% of the events had occurred at the victim's home; 43.6% were instances of repeat violence, and that proportion was higher among the children aged six to nine years old (53.8%; $p < 0.001$). No injury occurred in 39.6% of the cases, and in the cases with injuries, the head/neck was the most affected body part (35.4%), followed by the chest/abdomen/pelvis (33%). As to their progression, 89.6% of the children were discharged, while 198 (1.5%) died; 129 deaths were a direct consequence of violence, and 69 were due to other causes. In total, 61.6% of the children were referred to outpatient follow-up, and this proportion was higher among the older children, i.e., those aged six to nine years old (70.7%). A total of 22.2% of the cases were admitted to hospitals, and this proportion was higher among the children aged zero to one year old (32.5%; $p < 0.001$) (Table 2).

The predominant type of violence was neglect (n = 7,716; 47.5%), followed by physical (n = 5,969; 38.5%), sexual (n = 5,675; 37%) and psychological/moral (n = 3,772; 25.2%) violence. Physical violence predominated in age range six to nine years old (44.9%), followed by age range zero to one year old (37.6%; $p < 0.001$). Sexual violence was most frequent among the children aged six to nine years old (52.3%) and least frequent among the ones aged zero to one year old (11.3%; $p < 0.001$). Neglect was most frequent among children aged zero to one year old (67.8%; $p < 0.001$), and psychological violence was predominant in the group of children aged six to

Table 1. Reporting of violence against children according to demographic characteristics per age bracket. Brazil, 2011.

Characteristics	Age bracket (years)								p-value
	0 to 1 (N = 5,909; 33.0%)		2 to 5 (N = 6,401; 35.8%)		6 to 9 (N = 5,590; 31.2%)		Total (N = 17,900; 100.0%)		
	N	%	N	%	N	%	N	%	
Sex [n = 17,900]									0.000
Female	3,066	51.9	3,564	55.7	3,093	55.3	9,723	54.3	
Male	2,843	48.1	2,837	44.3	2,497	44.7	8,177	45.7	
Race/skin color [n = 13,873]									0.000
White	2,235	51.8	2,551	50.4	2,049	45.6	6,835	49.3	
Afro-descendant/mulatto	2,019	46.8	2,439	48.2	2,361	52.6	6,819	49.2	
Indigenous	65	1.7	71	1.4	83	1.9	219	1.6	
Deficiency [n = 12,972]									0.000
Yes	151	4.1	190	3.9	319	7.2	660	5.1	
No	3,519	95.9	4,690	96.1	4,103	92.8	12,312	94.9	
Region [17,900]									0.000
North	282	4.8	526	8.2	654	11.7	1,462	8.2	
Northeast	958	16.2	960	15.0	911	16.3	2,829	15.8	
Southeast	2,546	43.1	2,912	45.5	2,213	39.6	7,671	42.9	
South	1,338	22.6	1,313	20.5	1,248	22.3	3,899	21.8	
Mid-West	785	13.3	690	10.8	564	10.1	2,039	11.4	

Source: Ministry of Health, Health Surveillance Department, Violence and Accident Surveillance System (SINAN).

nine years old (38.2%; $p < 0.001$). The children's parents were the most common perpetrators (51.5%); this proportion was higher among the children aged zero to one year old (62.4%), followed by those aged two to five (49%) and those aged six to nine (43%) years old. In 23.8% of the cases, the perpetrator was suspected of having used alcohol; this proportion was higher among the children aged six to nine years old (26.3%; $p < 0.001$). A total of 337 cases of torture were reported (2.3%), and there were legal interventions in 62 cases (0.4%) (Table 3).

Table 4 describes the PRs of the main types of violence against children according to selected characteristics. Physical violence was predominant among boys (PR: 1.22; 95% CI: 1.16-1.28), especially among those aged six to nine years old (PR: 1.19; 95% CI: 1.12-1.27), and was least frequent among those aged two to five years old (PR: 0.89; 95% CI: 0.83-0.95). Offenders other than the children's parents were the most prevalent perpetrators of the violence, and most had used alcohol (PR: 1.36; 95% CI: 1.27-1.47).

Sexual violence was prevalent among girls, especially among black/brown girls (PR: 1.12; 95% CI: 1.06-1.19), and the odds were greater among those aged six to nine years old (PR: 4.63; 95% CI: 4.22-5.08), followed by those aged two to five years old (PR: 1.44; 95% CI: 1.35-1.54).

Psychological violence was prevalent among girls, especially among black/brown children (PR: 1.10; 95% CI: 1.03-1.18), and the odds were greater among those aged six to nine years old (PR: 2.95; 95% CI: 2.69-3.23), followed by those aged two to five years old (PR: 1.88; 95% CI: 1.71-2.07). The odds of violent incidents at home were highest (PR: 1.40; 95% CI: 1.29-1.53), and offenders other than the children's parents were the most prevalent perpetrators. Most perpetrators were reported as having consumed alcohol (PR: 1.92; 95% CI: 1.77-2.10), and the odds were higher for repeat violence (PR: 2.62; 95% CI: 2.42-2.84).

Neglect was prevalent among boys (PR: 1.33; 955 CI: 1.27-1.39), without any difference based on ethnicity/skin color; the odds of occurrence were highest among the children aged zero to one year old. This type of violence was most frequent outside the children's homes, the most prevalent perpetrators were the children's parents (PR: 2.60; 95% CI: 2.47-2.74), the event was most often not a repeat incident (PR: 0.79; 95% CI: 0.74-

Table 2. Reporting of violence against children according to occurrence and region characteristics per age bracket. Brazil, 2011.

Characteristics	Age bracket (years)								p-value
	0 to 1 (N = 5,909; 33.0%)		2 to 5 (N = 6,401; 35.8%)		6 to 9 (N = 5,590; 31.2%)		Total (N = 17,900; 100.0%)		
	N	%	N	%	N	%	N	%	
Occurrence in the home [n = 15,655]									0.000
Yes	3,536	69.8	4,322	77.5	3,661	73.0	11,519	73.6	
No	1,527	30.2	1,252	22.5	1,357	27.0	4,136	26.4	
Repeated violence [n = 10,568]									0.000
Yes	1,083	35.4	1,463	39.7	2,057	53.8	4,603	43.6	
No	1,980	64,6	2,219	60,3	1,766	46,2	5,965	56,4	
Nature of injury [n = 13,634]									0.000
Bruise/sprain/wrench	570	11.9	577	12.1	624	15.3	1,771	13.0	
Cut/amputation	461	9.6	542	11.4	543	13.3	1,546	11.3	
Fracture/traumas	612	12.8	401	8.4	269	6.6	1,282	9.4	
Others	1,246	26.0	1,464	30.7	920	22.6	3,630	26.6	
No injury	1,906	39.8	1,781	37.4	1,718	42.2	5,405	39.6	
Body segment affected [n = 8,362]									0.000
Head/neck	1,278	48.2	919	29.9	760	28.8	2,957	35.4	
Thorax/abdomen/pelvis	465	17.5	1,208	39.3	1,086	41.2	2,759	33.0	
Upper members	320	12.1	296	9.6	279	10.6	895	10.7	
Lower members	185	7.0	236	7.7	233	8.8	654	7.8	
Multiple organs/regions	404	15.2	412	13.4	281	10.7	1,097	13.1	
Evolution [n = 13,191]									0.000
High	3,675	83.7	4,322	91.5	3,827	93.9	11,824	89.6	
Evasion/flight	593	13.5	359	7.6	217	5.3	1,169	8.9	
Death by violence	75	1.7	29	0.6	25	0.6	129	1.0	
Death from other causes	48	1.1	12	0.3	9	0.2	69	0.5	
Place sent in health sector [n = 13,763]									0.000
Outpatient	2,163	49.2	3,222	64.7	3,098	70.7	8,483	61.6	
Inpatient	1,430	32.5	1,034	20.8	593	13.5	3,057	22.2	
No	808	18.4	722	14.5	693	15.8	2,223	16.2	

Source: Ministry of Health, Health Surveillance Department, Violence and Accident Surveillance System (SINAN).

0.84), and most perpetrators were not reported as having consumed alcohol (PR: 0.82; 95% CI: 0.76-0.89).

Table 5 describes the distribution of the types of violence and corresponding odds of occurrence per geographical area; the results show that violence was prevalent in Southeastern Brazil.

Discussion

The aim of the present study was to understand the occurrence of violence against children according to its types and determinants to suggest protective actions for victims. Most incidents were cases of domestic violence, affected girls and were perpetrated by the children's parents. Violence was characterized by repeat occurrences, and one-fourth of the perpetrators were reported as having used alcohol. Neglect was the type of violence most often reported, followed by physical, sexual and psychological violence. The odds of physical violence and neglect were higher among boys, and the odds of sexual and psychological violence were higher among girls.

Underreporting and discrepancies among the data on violence against children pose a problem in several parts of the world[28-31].

In 2006, when VIVA was launched, only 26 counties notified cases. That number increased to 1,496[15] in 2010 and to 3,000 in 2014, which allows for a more thorough understanding of the

Table 3. Reporting of violence against children according to type of violence and characteristics of the perpetrator by age bracket. Brazil, 2011.

Characteristics	Age bracket (years)								p-value
	0 to 1 (N = 5,909; 33.0%)		2 to 5 (N = 6,401; 35.8%)		6 to 9 (N = 5,590; 31.2%)		Total (N = 17,900; 100.0%)		
	N	%	N	%	N	%	N	%	
Type of violence									0.000
Physical	1,863	37.6	1,863	33.5	2,243	44.9	5,969	38.5	0.000
Psychological/moral	608	12.9	1,311	24.3	1,853	38.2	3,772	25.2	0.000
Torture	90	2.0	79	1.5	168	3.6	337	2.3	0.000
Sexual	534	11.3	2,521	44.9	2,620	52.3	5,675	37.0	0.206
Financial/economic	44	0.9	34	0.6	41	0.9	119	0.8	0.000
Negligence	3,729	67.8	2,575	44.6	1,412	28.4	7,716	47.5	0.000
Clild labor	6	0.1	17	0.3	38	0.8	61	0.4	0.504
Legal Intervention	22	0.5	18	0.3	22	0.5	62	0.4	0.000
Others	285	6.2	179	3.5	112	2.5	576	4.0	0.000
Parents[a] as perpetrators [17,900]									
Yes	3,686	62.4	3,138	49.0	2,402	43.0	9,226	51.5	
No	2,223	37.6	3,263	51.0	3,188	57.0	8,674	48.5	
Ingestion of alcoholic drink by the perpetrator [9,280]									0.000
Yes	749	26.1	652	19.7	811	26.3	2,212	23.8	
No	2,126	74,0	2,665	80,3	2,277	73,7	7,068	76,2	

Source: Ministry of Health, Health Surveillance Department, Violence and Accident Surveillance System (SINAN).
[a] Includes father, mother, stepfather, stepmother.

occurrence of violence in Brazil. This improvement in the surveillance of violence was due to the success of the initial strategy implemented in sentinel services, to a 2011 ministerial order that made notification of victims mandatory, and to the inclusion of this topic in the Public Health Action Organizational Contract[32]. That expansion has contributed to increasing the surveillance actions and the development of networks of delivery of care to victims of violence[18,19].

The considerable development of an information and handling system notwithstanding, comparisons among regions, states or counties are not yet possible, as Violence Surveillance is at different levels of implementation across the country. A high frequency of notified cases possibly reflects improvements in surveillance, greater commitment of managers and higher sensitization of technical staffs. For that reason, one should not infer that the Southeast is the most violent region in Brazil but rather that more cases are notified due to more advanced establishment of injury surveillance in this area. Significant underreporting[19] represents one of the main limitations of the present study, as it does not allow considering the notified incidents as representing the full picture of violence against children but as just a fraction or a *proxy* for the problem. Parallel to improvements in surveillance, the data will increasingly represent the actual violence that is perpetrated in different regions and within domestic settings.

The delicate nature of the problem posed by violence against children is one further factor that points to the need for advances in reporting by training professionals aiming at the care and identification of hidden cases. Some professionals feel uncomfortable when dealing with some cases of abuse[21,33], while others do not perceive signs of violence because the alleged reasons to procure care are masked, and there are some who feel threatened and thus choose not to expose themselves[21]. The distinction between notification and actual occurrence of cases is crucial to recognize the efforts made by the services with the best notification records[20]. However, despite the active participation of professionals in the identification and detection of violent incidents, the data required by the notification forms are self-reported, i.e., provided by the children's par-

Table 4. Prevalence (%) and prevalence ratio (PR) of the main types of violence against children according to characteristics. Brazil, 2011.

Characteristics	Type of violence							
	Physical		Psychological		Sexual		Negligence	
	%	PR (CI 95%)	%	PR (CI 95%)	%	PR (CI 95%)	%	PR (CI 95%)
Sex								
Female	34.9	1.00	28.8	1.00	48.4	1.00	41.3	1.00
Male	42.7	**1.22 (1.16-1.28)**	20.9	**0.72 (0.68-0.77)**	22.7	**0.47 (0.44-0.50)**	54.8	**1.33 (1.27-1.39)**
Race/skin color								
White	36.8	1.00	25.1	1.00	36.3	1.00	43.9	1.00
Afro-descendant/ mulatto	39.2	1.06 (1.00-1.13)	27.6	**1.10 (1.03-1.18)**	40.9	**1.12 (1.06-1.19)**	44.2	1.01 (0.96-1.06)
Indigenous	37.0	1.00 (0.79-1.27)	27.5	1.10 (0.83-1.45)	44.7	1.23 (0.99-1.52)	40.3	0.92 (0.73-1.15)
Age bracket (years)								
0 to 1	37.6	1.00	12.9	1.00	11.3	1.00	67.8	1.00
2 to 5	33.5	**0.89 (0.83-0.95)**	24.3	**1.88 (1.71-2.07)**	44.9	**3.97 (3.62-4.36)**	44.6	**0.66 (0.63-0.69)**
6 to 9	44.9	**1.19 (1.12-1.27)**	38.2	**2.95 (2.69-3.23)**	52.3	**4.63 (4.22-5.08)**	28.4	**0.42 (0.39-0.44)**
Occurrence in the home								
No	37.5	1.00	20.1	1.00	28.1	1.00	53.0	1.00
Yes	38.0	1.01 (0.95-1.08)	28.2	**1.40 (1.29-1.53)**	38.8	**1.38 (1.29-1.48)**	44.9	0.85 (0.80-0.89)
Parents[a] as pepetrators								
No	43.6	1.00	26.5	1.00	53.7	1.00	25.7	1.00
Yes	33.3	**0.76 (0.73-0.80)**	24.0	**0.90 (0.85-0.96)**	20.0	**0.37 (0.32-0.40)**	66.7	**2.60 (2.47-2.74)**
Repeated violence								
No	39.5	1.00	16.8	1.00	31.2	1.00	45.5	1.00
Yes	41.9	1.06 (1.00-1.13)	44.1	**2.62 (2.42-2.84)**	45.0	**1.44 (1.35-1.54)**	35.8	**0.79 (0.74-0.84)**
Ingestion of alcoholic drink by the perpetrator								
No	35.9	1.00	22.1	1.00	33.8	1.00	46.2	1.00
Yes	49.0	**1.36 (1.27-1.47)**	42.5	**1.92 (1.77-2.10)**	35.8	1.06 (0.97-1.15)	37.8	**0.82 (0.76-0.89)**

Source: Ministry of Health, Health Surveillance Department, Violence and Accident Surveillance System (SINAN). [a] Includes father, mother, stepfather, stepmother. CI 95%: confidence interval of 95%. Statistically significant differences are emphasized in bold print ($p < 0,05$).

Table 5. Prevalence (%) and prevalence ratio (PR) of the main types of violence against children according to characteristics. Brazil, 2011.

Characteristics	Type of violence							
	Physical		Psychological		Sexual		Negligence	
	%	PR (CI 95%)	%	PR (CI 95%)	%	PR (CI 95%)	%	PR (CI 95%)
Region								
Mid-West	29.1	1.00	18.6	1.00	26.4	1.00	59.6	1.00
North	39.3	**1.35 (1.20-1.52)**	44.1	**2.37 (2.08-2.71)**	72.1	**2.73 (2.45-3.04)**	20.2	**0.34 (0.30-0.39)**
Northeast	41.2	**1.42 (1.28-1.57)**	24.2	**1.30 (1.14-1.49)**	33.1	**1.25 (1.12-1.40)**	51.9	**0.87 (0.80-0.94)**
Southeast	43.2	**1.49 (1.36-1.63)**	20.4	**1.09 (0.97-1.23)**	37.1	**1.40 (1.28-1.55)**	47.4	**0.80 (0.74-0.85)**
South	33.1	**1.14 (1.03-1.26)**	30.0	**1.61 (1.43-1.82)**	31.2	**1.18 (1.06-1.31)**	48.7	**0.82 (0.76-0.88)**

Source: Ministry of Health, Health Surveillance Department, Violence and Accident Surveillance System (SINAN). CI 95%: confidence interval of 95%. Statistically significant differences are emphasized in bold print ($p < 0,05$).

ents, guardians or chaperons; thus, the possibility of information bias cannot be ruled out. It is worth observing that the present study found that not all the fields in the notification form were filled out; the omissions (i.e., blank, missing and ignored data) resulted in differences in the total numbers of cases among the investigated variables.

The domestic environment was highly significant, and the number of repeat incidents was high, particularly among children aged six to nine years old, which contribute to the perpetuation of the cycle of suffering and deep traumas in the lives of the affected children[1,20]. Physical, sexual and psychological violence predominated among the children aged six to nine years old, and neglect was most common among those under one year old. The children's parents were the main perpetrators of violent incidents, while the number of perpetrators suspected of having used alcohol was significant.

These findings demand some reflections on the dialectics of violence. While transculturally imposed gender relationships cause girls and women to be particularly exposed to some types of violence[1,15,19,34-37], the male universe and its power symbols result in men and boys being exposed to other types, such as physical violence, and they tend to be the main victims of aggressions and urban violence[1,17,18,38]. In the present study, we found that boys exhibited the highest PRs of physical violence and neglect, while girls exhibited the highest PRs of psychological and sexual violence.

Deslandes et al.[20] describe violence as a global problem present in families from any social class and with any religion or beliefs and observe that its effects result from the interaction of the various levels of inclusion in the citizenship of a society. Nevertheless, black citizens are the main victims of social and economic inequities, even though violence affects different social strata and ethnic/skin color groups[22,39]. Those features were detected in the present study, mainly relative to psychological and sexual violence.

The Brazilian and international literature confirms the results of the present study indicating the domestic environment as the preferential locus of interpersonal violence perpetrated by the children's parents or other relatives[1,16-20,35,40,41]. That situation is partially due to the fact that children spend more time at home than anywhere else and to the links between violence and the cultural process of "educating" children by means of punishment and threats[18,19]. As a result, the family home, which should be a place of protection and education, becomes a stage for violence of different types, power/duty transgressions and objectification of childhood[20]. Any form of structural violence affecting the family should also be taken into consideration, as it contributes to the perpetuation of interpersonal violence in the home setting[1,20].

Alcohol use by perpetrators is a risk factor often described in the literature[15,19,33,42]. It was present in one-fourth of the incidents analyzed in the present study and was most frequently reported for the perpetrators of violence against children aged zero to one year old.

The results of the present study show that the head/neck was the body area most affected, followed by the chest/abdomen/pelvis; these findings agree with reports by Malta et al.[19] and Martins[17]. The United Nations Children's Fund (UNICEF)[35] describes "shaken baby syndrome" as the cause of many head injuries. Assis and Deslandes[43] observed that trauma is more frequent in the head and abdomen as are burns in the perineum, chest, buttocks and thighs.

In agreement with the literature[6,15,17,19], according to which mild cases are most prevalent, most cases analyzed in the present study were mild, and the children were discharged; this fact does not make the problem any less serious. Approximately one-fourth of the children required hospital admission, and 198 died, which is indicative of the victims' vulnerability.

Among the violence types, neglect was the most frequent, affecting mainly children aged zero to one year old and boys, a trend that was indicated by VIVA[15]. Different from the present study, a survey conducted by UNICEF[35] found girls to be more exposed to neglect and violence than boys, especially children with disabilities. One study conducted in the United States found that 45% of aggressions perpetrated against children were instances of family neglect[22]. Neglect permeates all forms of lack of or insufficient physical, emotional and social care that also affect the family as a whole[1,20,35] but might also be an expression of intentional negligence[1]. Neglect also occurs when mothers are drug addicts[44]. The children's parents were the main perpetrators of violence, which agrees with reports in the literature indicating that parents are significant perpetrators of neglect[1,19,21].

Physical violence most frequently affected older boys (six to nine years old), thus agreeing with reports in the literature showing that boys are more exposed to physical violence compared

to girls and that its prevalence increases with age[1,17,35]. There is a higher chance of alcohol use by perpetrators.

In the present study, the odds of sexual violence were higher among girls aged six to nine years old, followed by those aged two to five years old and among black/brown children; these findings agree with reports in the literature[18,22,34,36,45-47]. UNICEF[35] states that 20% of adult women and 5 to 10% of adult men reported having been victims of sexual violence in childhood. The results further showed that in 2002, approximately 150 million girls and 73 million boys under 18 years old were forced to have sexual intercourse or were subjected to other forms of sexual violence involving physical contact. In addition, that study also pointed to repeat violence and violence at home.

The odds of psychological violence were higher among black/brown girls and increased with age. Incidences of psychological violence were repeat offenses and were most frequent in the home setting, and the use of alcohol by perpetrators was frequent. Assis and Avanci[48] observed that there is little information and few statistical data on this type of violence, which involves depreciating children through humiliations, threats, prohibitions and mocking that undermine their self-esteem; it frequently coexists with other forms of violence[1,20,35,49]. According to WHO[36] estimates, 25 to 50% of children are subjected to some variety of psychological abuse. In the study conducted by Moura and Reichenheim[49], most respondents reported the use of psychological violence against children, and the discrepancy between the "spontaneous" narratives and those located in active searches are deserving of attention as an indicator of underreporting. Another study, performed in Iran, also found that most interviewees (52.09%) had been subjected to psychological abuse[23].

Conclusion

If the origin of the history of violence may be traced back to the pre-civilized period of humankind, its deconstruction demands the awareness and commitment of society at large vis-à-vis the inequities existing in the present time. Although the rights of children and youths are described in constitutions and declarations worldwide, their universal application is the goal of social movements, professionals working in this field and the overall population.

Within that context, health plays an important role in developing intersectoral policies and networks (including judiciary, education, health and social work, among others) to potentiate and increase protective actions and others aiming at promoting quality of life at the individual and collective levels[13,50,51].

The VIVA notification system is a powerful tool to break the silence on and the invisibility of violence. Mandatory notification[27] represents a significant step in making the dimension and complexity of violence explicit, especially because it also includes the suspected cases. The Ministry of Health's National Policy of Health Promotion is crucial as a function of its intersectoral scope and the investment made in the prevention of illnesses and risks and the integrated treatment of victims[52].

A broad-scope debate involving society at large is the best path toward the construction of a fairer society, in which all children are assured their right to life and citizenship.

Collaborators

DC Malta, SMM Rates and EM Melo participated in the study conception and design, data analysis and interpretation, writing of the first version of the manuscript and critical revision and approved the version to be published. MDM Mascarenhas participated in the study conception and design, data analysis and critical revision and approved the version to be published.

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