

Factors associated with the recurrence of violence against children and adolescents. Mato Grosso-Brazil, 2013 to 2019

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THEMATIC ARTICLE

Silvana Maria da Silva (<https://orcid.org/0000-0002-1699-5757>)^{1,2}
Amanda Cristina de Sousa Andrade (<https://orcid.org/0000-0002-3366-4423>)^{1,2}
Francine Nesello Melanda (<https://orcid.org/0000-0002-5692-0215>)^{1,2}
Ligia Regina de Oliveira (<https://orcid.org/0000-0002-7325-1391>)^{1,2}

Abstract *This study examined factors associated with the recurrence of interpersonal violence against children and adolescents in Mato Grosso state, considering cases recorded in the Notifiable Diseases Information System, from 2013 to 2019. Associations between variables were estimated by logistic regression and stratified by age group (children and adolescents). The frequency of recurrent violence against children was 49.0% and, against adolescents, 42.9%. For both, recurrent violence was positively associated with occurrence at home, psychological or emotional violence, aggressors' being more than two, their being relatives and threats being the means of aggression. Neglect or abandonment and male or both-sex aggressors were positively associated with recurrent violence against children. Against adolescents, poor education, sexual violence and intimate-partner aggressors were positively associated with recurrent violence, while other aggressors and firearms or physical force were negatively associated. The findings offer significant contributions to knowledge of factors associated with recurrent violence, which is still little studied in the national and international literature. This is essential in order to inform strategies to reduce the recurrence of violence and protect children and adolescents.*

Key words *Violence, Child, Adolescent, Recurrence*

¹ Grupo de Pesquisa CNPq "Violências, Acidentes e Saúde Coletiva". Brasil.
² Programa de Pós-Graduação em Saúde Coletiva, Instituto de Saúde Coletiva, Universidade Federal de Mato Grosso. Av. Fernando Corrêa da Costa 2367, Boa Esperança. 78060-900 Cuiabá MT Brasil.
csouza.amanda@gmail.com

Introduction

Violence is a public health problem and ranks second among causes of mortality in the 0 to 19 year-old age group, and the trend has been upward in recent years^{1,2}. In 2012, there were 95,000 homicide victims in this age group, with the largest number concentrated in Latin America and the Caribbean³.

The problem of violence, although not new in our society, is still a very delicate subject, especially when it involves children and adolescents. Violence causes individual, collective and economic losses, at a worldwide cost of US\$7 trillion per year from violence against children alone².

Cases of violence against children and youth are multi-causal and are thus not directly related only to race, class, religion or culture. Social vulnerability, however, is associated with greater risk of violence in childhood⁴. Children are among the groups most vulnerable to violence, because of the stage of their development and their dependence on care and protection from adults⁵.

In Brazil, the Child and Adolescent Statute (*Estatuto da Criança e do Adolescente*, ECA) enacted in the 1990s constituted a major advance in the fight against child violence, by establishing that it is health personnel's duty to report cases of abuse⁶. Moreover, in 2011 the Ministry of Health set up a Violence and Accident Surveillance System (*Sistema de Vigilância de Violências e Acidentes*, VIVA) to inform public health policies and contribute to preventing violence and promoting a culture of peace by means of data reported by health services⁷. It has been suggested that commonly the cases reported are the most severe, resulting from prior violence⁸.

Recurrent violence has multiple, significant adverse effects on children and adolescents⁹, leaving immeasurable, invisible marks and directly impacting their health and quality of life¹⁰⁻¹².

Recurrent violence exposes the child to chronicity of the event, jeopardising their growth and development and increasing their likelihood of death^{13,14}. Recurrent violence against adolescents is associated with greater transgression of social norms, lower resilience and impaired self-esteem^{15,16}.

Certain factors have been identified as associated with the recurrence of violence against children and adolescents¹⁷⁻²³. A systematic review of cohort studies found that neglect, younger age, cases involving multiple types of abuse and factors in the family environment, such as poverty and mental health problems, were associat-

ed with more frequent recurrence¹⁹. Studies in Brazil to investigate the recurrence of violence against children and adolescents have examined cross-sections by type of violence²³ or specific group (children only²² or adolescents only²¹).

Accordingly, it is important to know the characteristics and risk factors associated with recurrent violence in children and adolescents in order to support measures and decision-making by professionals and managers to reduce these recurrences. This study examined factors associated with the recurrence of interpersonal violence against children and adolescents in Mato Grosso state, from 2013 to 2019.

Method

This study used data from notifications of violence against children and adolescents in Mato Grosso from 2013 to 2019. Children and adolescents were considered to be, respectively, 0 to 9 and 10 to 19 years old, as defined by the World Health Organisation²⁴. The data were provided by the Mato Grosso State Health Department and extracted from the Interpersonal and Self-Inflicted Violence Surveillance (VIVA-Sinan) component of the Violence and Accident Surveillance System (*Sistema de Vigilância de Violências e Acidentes*, VIVA), in turn part of Brazil's Notifiable Diseases Information System. Since 2011 it has been mandatory for all public and private health establishments in Brazil to report violence against children and adolescents²⁵. Records of cases of self-harm were excluded from this study.

Data on the dependent variable, recurrent violence, were obtained from the question as to whether or not the violence reported had occurred at other times (No; Yes; Unknown). Thus, all comparisons in this study were made between the group exposed to recurrent violence ('Yes' category of the variable 'Occurred at other times') and the non-recurrent, single-instance violence group ('No' category). Cases with data Unknown were excluded from the analysis (n = 1,018).

The independent variables analysed were divided into blocks in the following order: (1) victim characteristics: sex (female; male), race/skin colour (black/brown; indigenous; white/yellow), education (illiterate/lower secondary education; upper secondary/higher education), marital status (married/stable union; no partner), disability/disorder (Yes, No). Physical, intellectual, vision and hearing impairments, mental disorders, behavioural disorders and other disabilities and

disorders were considered; (2) characteristics of the violence: time of occurrence (by day – morning/afternoon; at night – night/early morning); place where the violence occurred (residence; bar or similar; school/sports venue; public place; other locations – others, commerce/services, industries/construction); (3) type of violence: physical (Yes; No), psychological/emotional (Yes; No), sexual (Yes; No), neglect/abandonment (Yes; No); (4) characteristics of the likely aggressor: sex (female; male; both), age group of the aggressor – age group of the likely aggressor (child – 0 to 9 years; adolescent – 10 to 19 years; young adult – 20 to 24 years; adult – 25 to 59 years old; older adult – 60 years old or more), number of people involved (one; two or more), alcohol consumed by likely aggressor (Yes; No), relation to the victim (relative – father, mother, stepfather, stepmother, sibling and child; friends/acquaintances – friends/acquaintances, caregivers, employer/boss; others – persons unknown, police, institutional, others); and (5) means of aggression: physical force (Yes; No); strangulation (Yes; No), blunt force (Yes; No), sharp object (Yes; No), hot object/substance (Yes; No), poison (Yes; No), firearm (Yes; No), threat (Yes; No), means other than previously specified (Yes; No). The variables type of violence and relation to the victim allowed multiple responses. The variables education and marital status were considered for adolescents only.

The stratification variable was age group in years: 0 to 9 – children and 10 to 19 – adolescents.

The data were treated by descriptive analysis using absolute and relative frequencies. Frequency of recurrent violence against children and adolescents was calculated by independent variable. Associations between recurrent violence against children and adolescents and the independent variables were ascertained by univariate and multiple analyses. Odds ratios (ORs) were estimated, with respective confidence intervals (95%CI), using logistic regression models. In all analyses, the group exposed to recurrent violence was compared with the group not exposed to recurrent violence.

Variables with p-value of less than 0.20 in the univariate analysis were included in the multiple model. The multiple model was fitted by hierarchical entry of independent variables, which were organised into blocks in the following order: (1) characteristics of victim; (2) characteristics of violence; (3) type of violence, (4) characteristics of probable aggressor; and (5) characteristics of means of aggression.

For each hierarchical level, a model was fitted by excluding the variables with the highest p-values. The model was then re-estimated after each exclusion, and so on until all variables at the same level remained significant at 5%. The variables at more distal levels remained as adjustment factors for hierarchically lower levels. In the final model, a 5% level of significance was used to determine the variables associated with recurrent violence. All analyses were stratified by age group (children and adolescents). The analyses were carried out using STATA software, version 12.

The project was approved, on 16 June 2020, by the research ethics committee of the Universidade Federal de Mato Grosso, on Application for Ethics Appraisal Certificate (*Certificado de Apresentação para Apreciação Ética*, CAAE) No. 30260420.9.0000.8124 and Opinion No. 4.091.189.

Results

From 2013 to 2019, 5,742 cases of interpersonal violence against children and adolescents were recorded in Mato Grosso state, 1,018 (18.3%) of which were excluded because the 'Occurred at other times' field was left blank. Of the 4,553 cases for which this variable was recorded, 44.7% (2,037) reported recurrent violence, which was more frequent among children (49.0%) than adolescents (42.9%).

In the total of reported cases of interpersonal violence analysed (n = 4,553), most of the children and adolescents were female and of black or brown race/colour; violence occurred most often in the residence, aggressors were mainly male and the aggression was most commonly by physical force or threats. The most frequent types of violence against children were sexual (61.5%), physical (45.4%), psychological or emotional (37.3%) and neglect or abandonment (10.0%); the aggressor was a friend or acquaintance (58.7%) or relative (43.7%). Against adolescents, violence was mostly physical (60.7%), sexual (48.6%), psychological or emotional (33.3%) and the aggressor was a friend or acquaintance (35.4%) (Tables 1, 2 and 3).

Female adolescents with little education (illiterate or lower secondary education) and married or in a stable union faced higher odds or recurring violence. The home was the place where violence was most likely to recur against both children (OR = 2.43; 95%CI: 1.62-3.64) and adolescents (OR = 2.44; 95%CI: 1.94-3.06), while

Table 1. Frequency distribution (number and %) of notified cases of violence and recurrent violence against children and adolescents and associations with characteristics of victim, violence and type of violence. Mato Grosso, 2013 to 2019.

Variables	Children (n = 1,360)			Adolescents (n = 3,193)		
	n (%)	Recurrent violence ^a		n (%)	Recurrent violence ^a	
		n (%)	OR (95%CI)		n (%)	OR (95%CI)
Characteristics of victim						
Sex						
Female	925 (68.0)	468 (50.6)	1.21 (0.97-1.53)	2,418 (75.7)	1,163 (48.1)	2.54 (2.13-3.04)
Male	435 (32.0)	199 (45.7)	1.00	775 (27.3)	207 (26.7)	1.00
Race or skin colour						
Black or brown	891 (67.6)	456 (51.2)	1.26 (0.99-1.60)	2,272 (73.0)	961 (42.3)	0.93 (0.79-1.09)
Indigenous	34 (2.6)	16 (47.0)	1.07 (0.53-2.16)	57 (1.8)	30 (52.6)	1.41 (0.82-2.42)
White or yellow	393 (29.8)	178 (45.3)	1.00	786 (25.2)	346 (44.0)	1.00
Schooling						
Illiterate/lower secondary	-	-	-	1,186 (43.8)	725 (47.7)	1.53 (1.31-1.79)
Upper secondary/higher education	-	-	-	1,520 (56.2)	442 (37.3)	1.00
Marital status						
Married/stable union	-	-	-	330 (11.6)	165 (50.0)	1.38 (1.10-1.74)
Single	-	-	-	2,513 (88.4)	1,053(41.9)	1.00
Disability/disorder						
Yes	45 (3.6)	28 (62.2)	1.76 (0.95-3.26)	134 (4.4)	69 (51.5)	1.41 (0.99-1.99)
No	1,215 (96.4)	586 (48.2)	1.00	2,881 (95.6)	1,237 (42.9)	1.00
Characteristics of violence						
Time of occurrence ¹						
Day	461 (62.1)	199(43.2)	1.09 (0.81-1.48)	979 (43.3)	398 (40.6)	1.17 (0.99-1.39)
Night	281 (37.9)	115(40.9)	1.00	1,276 (56.6)	470 (36.8)	1.00
Place of occurrence						
Home	1,031 (78.2)	563 (54.6)	2.43 (1.62-3.64)	1,864 (60.0)	1,027 (55.1)	2.44 (1.94-3.06)
Bar or similar	74 (5.6)	7 (50.0)	2.02 (0.66-6.18)	157 (5.1)	22 (21.1)	0.53 (0.31-0.89)
School/sports venue	14 (1.1)	27 (36.5)	1.16 (0.63-2.13)	104 (3.3)	47 (29.9)	0.85 (0.57-1.26)
Public place	82 (6.2)	20 (24.4)	65 (0.34-1.23)	578 (18.6)	109 (18.9)	0.46 (0.34-0.62)
Outros locais ²	118 (8.9)	39 (33.0)	1.00	401 (12.9)	134 (33.4)	1.00
Type of violence						
Physical						
Yes	602 (45.4)	293 (48.7)	0.97 (0.78-10.21)	1,909 (60.7)	705 (36.9)	0.53 (0.46-0.62)
No	723 (54.6)	356 (49.2)	1.00	1,238 (39.3)	645 (52.1)	1.00
Psychological/emotional						
Yes	491 (37.3)	311 (63.3)	2.49 (1.98-3.13)	1,035 (33.3)	555 (53.6)	1.89 (1.62-2.20)
No	826 (62.7)	338 (40.9)	1.00	2,076 (66.7)	787 (37.9)	1.00
Sexual						
Yes	814 (61.5)	434 (53.3)	1.45 (1.16-1.82)	1,523 (48.6)	809 (53.1)	2.22 (1.92-2.56)
No	510 (38.5)	224 (43.9)	1.00	1,610 (51.4)	544 (33.8)	1.00
Neglect/abandonment						
Yes	133 (10.0)	94 (70.7)	2.73 (1.84-4.02)	87 (2.8)	66 (75.9)	4.33 (2.64-7.12)
No	1,187 (89.9)	557 (46.9)	1.00	3,022 (97.2)	1,270 (42.0)	1.00

^a Comparison group: non-recurrent violence. ¹Time of occurrence: day - morning/afternoon; night - night/early morning; ²other places: others, commerce/service, industry/construction.

Source: Authors.

Table 2. Frequency distribution (number and %) of notified cases of violence and recurrent violence against children and adolescents and associations with characteristics of probable aggressor. Mato Grosso, 2013 to 2019.

Characteristics of probable aggressor	Children (n = 1,360)			Adolescents (n = 3,193)		
	n (%)	Recurrent violence ^a		n (%)	Recurrent violence ^a	
		n (%)	OR (95%CI)		n (%)	OR (95%CI)
Aggressor sex						
Female	221 (17.5)	94 (42.5)	1.00	313 (10.1)	99 (31.6)	1.00
Male	976 (77.5)	513 (52.5)	1.50 (1.11-2.01)	2,706 (87.6)	1,218 (45.0)	1.76 (1.37-2.71)
Both	63 (5.0)	46 (73.0)	3.65 (1.97-6.77)	69 (2.2)	33 (47.8)	1.98 (1.16-3.36)
Aggressor age group						
0 to 9 years	108 (11.1)	35 (32.4)	1.00	27 (1.2)	8 (29.6)	1.00
10 to 19 years	138 (14.2)	61 (44.2)	1.65 (0.97-2.79)	579 (26.0)	259 (44.7)	1.92 (0.82-4.46)
20 to 24 years	97 (10.0)	49 (50.5)	2.12 (1.20-3.75)	498 (22.4)	191 (38.3)	1.47 (0.63-3.44)
25 to 59 years	592 (60.9)	337 (56.9)	2.75 (1.78-4.25)	1,081 (48.5)	539 (49.8)	2.36 (1.02-5.44)
60 years or more	37 (3.8)	24 (64.8)	3.85 (1.75-8.45)	42 (1.9)	22 (52.4)	2.61 (0.93-7.27)
Number of aggressors						
One	1,020 (80.8)	501 (49.1)	1.00	2,323 (75.7)	1,053 (45.3)	1.00
Two or more	243 (19.2)	140 (57.6)	1.40 (1.06-1.86)	746 (24.3)	275 (36.8)	0.70 (0.59-0.83)
Alcohol consumed						
Yes	225 (22.5)	127 (56.4)	1.42 (1.05-1.91)	869 (35.5)	339 (39.0)	0.72 (0.61-0.85)
No	776 (77.5)	370 (47.7)	1.00	1,647 (65.5)	772 (46.9)	1.00
Relation to victim¹						
Relative						
Yes	594 (43.7)	346 (58.2)	1.93 (1.56-2.40)	621 (19.4)	424 (68.3)	3.70 (3.07-4.46)
No	766 (56.3)	321 (41.9)	1.00	2,572 (80.6)	946 (36.8)	1.00
Friend/acquaintance						
Yes	798 (58.7)	286 (50.9)	1.13 (0.91-1.41)	1,131 (35.4)	441 (39.0)	0.78 (0.67-0.90)
No	562 (41.3)	381 (47.7)	1.00	2,062 (64.6)	929 (45.0)	1.00
Intimate partner						
Yes	32 (2.4)	18 (56.2)	1.34 (0.66-2.73)	635 (19.9)	383 (60.3)	2.42 (2.02-2.89)
No	1,328 (97.6)	649 (48.9)	1.00	2,558 (80.1)	987 (38.6)	1.00
Other						
Yes	159 (11.7)	53 (33.3)	0.48 (0.34-0.68)	790 (24.7)	158 (20.0)	0.24 (0.20-0.30)
No	1,201 (88.3)	614 (51.1)	1.00	2,403 (75.3)	1,212 (50.4)	1.00

^a Comparison group: non-recurrent violence. ¹ Relative includes father, mother, stepfather, stepmother, sibling and child. Friend/acquaintance includes friend/acquaintance, caregiver and employer/boss. Intimate partner includes spouse, former spouse, intimate partner and former intimate partner. Others include strangers, police, institutional and others.

Source: Authors.

odds were lowest for teenagers in public places and bars or similar places. By type of violence, psychological or emotional and sexual violence associated positively with recurrence against children and adolescents, while physical violence and neglect associated negatively with recurrence against adolescents (Table 1).

Recurrent violence was associated with aggressor characteristics (Table 2) as follows: there were higher odds of the aggressors' being either of both sexes or males. By aggressor age group, recurrent violence was more likely to be committed against children by older adults than by

other age groups (OR = 3.85; 95%CI: 1.75-8.45), although other age groups, such as adults and young adults, proved to be important. Higher odds of recurrence against adolescents were seen only in adults (OR = 2.36; 95% CI: 1.02-5.44). There were higher odds that recurrent violence against children would be committed by two or more aggressors (OR = 1.40; 95%CI: 1.06-1.86) and if the aggressor used alcohol (OR = 1.42; 95%CI:1.05-1.91). For adolescents, two or more aggressors (OR = 0.70; 95%CI: 0.59-0.83) and aggressors' having used alcohol (OR = 0.72; 95%CI: 0. 61-0.85) returned lower odds of recurrent vi-

Table 3. Frequency distribution (number and %) of notified cases of violence and recurrent violence against children and adolescents and associations with means of aggression. Mato Grosso, 2013 to 2019.

Means of aggression	Children (n = 1,360)			Adolescents (n = 3,193)		
	n (%)	Recurrent violence ^a n (%)	OR (95%CI)	n (%)	Recurrent violence ^a n (%)	OR (95%CI)
Physical force						
Yes	479 (37.2)	273 (57.0)	1.65 (1.31-2.07)	1,515 (49.2)	610 (40.2)	0.80 (0.69-0.92)
No	809 (62.8)	360 (44.5)	1.0	1,565 (50.8)	714 (45.6)	1.0
Strangulation						
Yes	19 (1.5)	14 (73.7)	2.96 (1.06-8.27)	143 (4.7)	64 (44.7)	1.07 (0.77-1.51)
No	1,262 (98.5)	613 (48.6)	1.00	2,918 (95.3)	1,251 (42.9)	1.00
Blunt force						
Yes	47 (3.7)	19 (40.4)	0.69 (0.38-1.26)	133 (4.3)	63 (47.4)	1.20 (0.84-1.70)
No	1,232 (96.3)	608 (49.3)	1.00	2,926 (95.7)	1,252 (42.8)	1.00
Sharp object						
Yes	41 (3.2)	14 (34.1)	0.52 (0.27-1.01)	344 (11.2)	105 (30.5)	0.54 (0.42-0.69)
No	1,239 (96.8)	614 (49.5)	1.00	2,725 (88.8)	1,214 (44.5)	1.00
Hot object/substance						
Yes	20 (1.6)	7 (35.0)	0.55 (0.21-1.39)	12 (0.4)	4 (33.3)	0.66 (0.19-2.20)
No	1,266 (98.4)	624 (49.3)	1.00	3,051 (99.6)	1,312 (43.0)	1.00
Poisoning						
Yes	9 (0.7)	1 (11.1)	0.12 (0.16-1.03)	29 (0.9)	9 (31.0)	0.60 (0.26-1.30)
No	1,276 (99.3)	629 (49.3)	1.00	3,032 (99.1)	1,310 (43.2)	1.00
Firearm						
Yes	21 (1.6)	3 (14.3)	0.16 (0.50-0.60)	294 (9.6)	39 (13.3)	0.18 (0.12-0.25)
No	1,257 (98.4)	624 (49.6)	1.00	2,775 (90.4)	1,277 (46.0)	1.00
Threat						
Yes	342 (26.8)	244 (71.3)	3.50 (2.68-4.58)	836 (27.3)	445 (53.2)	1.75 (1.50-2.05)
No	933 (73.2)	388 (41.6)	1.00	2,227 (72.7)	877 (39.4)	1.00
Other means ¹						
Yes	255 (20.7)	99 (38.8)	0.62 (0.48-0.82)	263 (8.9)	139 (52.8)	1.53 (1.20-1.99)
No	977 (79.3)	493 (50.4)	1.00	2,679 (91.1)	1,129 (42.1)	1.00

^a Comparison group: non-recurrent violence. ¹ Means other than previously specified.

Source: Authors.

olence. As regards the aggressor's kinship, both children and adolescents were at greater likelihood of recurrent violence when the aggressor was relative and lesser likelihood when they had other relationships. For adolescents, the odds of recurrent violence were greater when the aggressor was an intimate partner (OR = 2.42; 95%CI: 2.02-2.89).

Recurrent violence against children was positively associated with threats (OR = 3.50; 95%CI: 2.68-4.58), followed by strangulation (OR = 2.96; 95%CI: 1.06-8.27) and physical force (OR = 1.65; 95%CI: 1.31-2.07), while against adolescents, higher odds were found for threats (OR = 1.75; 95%CI: 1.50-2.05) and other means (OR = 1.53; 95%CI: 1.20-1.99). On the other hand, negative associations with recurrent violence were found

for firearms (against both groups), other means (against children) and physical force and sharp objects (against adolescents) (Table 3).

In the adjusted analysis (Table 4), children were more likely to suffer recurrent violence if it occurred at home, if the type of violence was psychological/emotional or neglect/abandonment, when the aggressors were family members, male or of both sexes, if more than two aggressors were involved and the means of aggression was physical force or threat. Adolescents were more likely to suffer recurrent violence if they had little education (illiterate or lower secondary education), if the violence occurred at home, if the type of violence was psychological or emotional or sexual, if more than two aggressors were involved, if the aggressors were family members or

Table 4. Multiple models of associations with recurrent violence against children and adolescents. Mato Grosso, 2013 to 2019.

Variable	Children	Adolescents
	OR (95%CI) ^a	OR (95%CI) ^a
Characteristics of victim		
Sex		
Female	1.12 (0.84-1.49)	1.10 (0.83-1.45)
Male	1.00	1.00
Schooling		
Illiterate/lower secondary	-	1.25 (1.03-1.51)
Upper secondary/higher education	-	1.00
Characteristics of violence		
Place of occurrence		
Home	2.29 (1.42-3.70)	1.66 (1.24-2.22)
Bar/similar	1.19 (0.56-2.47)	1.03 (0.61-1.72)
School/sports venue	2.12 (0.60-7.47)	1.13 (0.61-2.11)
Public place	0.80 (0.40-1.62)	0.91 (0.62-1.31)
Other places ¹		
Type of violence		
Psychological/emotional		
Yes	1.68 (1.27-2.20)	1.68 (1.36-2.07)
No	1.00	1.00
Sexual		
Yes	-	2.14 (1.69-2.72)
No	-	1.00
Neglect/abandonment		
Yes	1.92 (1.15-3.20)	-
No	1.00	-

it continues

intimate partners and threats were the means of aggression. The lowest odds of recurrent violence against adolescents were when the relationship with the aggressor was “Other” and the means of aggression was a firearm or physical force.

Discussion

Although there are studies that describe the characteristics of occurrences of violence against children and adolescents in Brazil, there are as yet few records in the Brazilian and international literature that address recurrent violence in these populations^{21,23,26-29}.

This study revealed that the frequency of recurrent violence in children (49.0%) and adolescents (42.9%) was higher than in notification data for adolescents in Brazil from 2011 to 2017 (39.9%)³⁰ and for children in Espírito Santo state from 2011 to 2018 (32.5%)²² and in other Brazilian

municipalities in different periods^{8,31-33}. Frequencies of recurrent violence against children and adolescents also varied in other countries: 5.9% in South Korea¹⁷, 24.7% in Japan¹⁸ and around 20% in different studies in the United States¹⁹. There is thus no consensus in the literature as to the prevalence of recurrent violence; this can be accounted for by methodological differences between studies or by the as yet small number of studies that address the issue. Likewise, the difficulty in obtaining information, whether due to failure to record properly or the involvement of a person responsible, generally father and mother, in communicating the event can result in differences in results between studies^{22,34}.

The high frequency of recurrent violence revealed by this study indicated this population's social vulnerability, as well as the urgent need for measures to protect children and adolescents. Violence is a phenomenon that, given its magnitude and the vulnerability of those affected,

Tabela 4. Modelo múltiplo da associação entre violência recorrente contra crianças e adolescentes. Mato Grosso, 2013 a 2019.

Variable	Children	Adolescents
	OR (95%CI) ^a	OR (95%CI) ^a
Characteristics of probable aggressor		
Sex do Aggressor		
Male	1.60 (1.11-2.28)	-
Both	2.48 (1.13-5.43)	-
Female	1.00	-
Number of aggressors		
Two or more	1.48 (1.02-2.14)	1.41 (1.12-1.78)
One	1.00	1.00
Relation to victim¹		
Relative		
Yes	1.36 (1.03-1.79)	2.97 (1.12-1.78)
No	1.00	1.00
Intimate partner		
Yes	-	3.12 (2.40-4.05)
No	-	1.00
Others		
Yes	-	0.49 (0.37-0.65)
No	-	1.00
Means of aggression		
Physical force		
Yes	1.36 (1.04-1.78)	0.80 (0.65-0.99)
No	1.00	1.00
Firearm		
Yes	-	0.46 (0.29-0.74)
No	-	1.00
Threat		
Yes	2.37 (1.74-3.23)	1.31 (1.04-1.64)
No	1.00	1.00

OR – odds ratio; 95%CI – 95% confidence interval; ref. – reference category. ^a Comparison group: non-recurrent violence. ¹Other places: others, commerce/service, industry/construction; ²relative includes father, mother, stepfather, stepmother, sibling and child. Friend/acquaintance includes friend/acquaintance, caregiver and employer/boss. Intimate partner includes spouse, former spouse, intimate partner and former intimate partner. Others include strangers, police, institutional and others.

Source: Authors.

transcends social spheres and makes children and adolescents with little education and in unfavourable social conditions, more prone to recurrent violence^{22,34}.

The findings warrant concern as to why it takes so long for violence against children and adolescents to be recognised or revealed, as the home is the main setting for the violence and the perpetrator, close to the victim. In cases of recurrent violence, the aggressors against children and adolescents were a family member (father, mother, stepfather, stepmother, sibling or child) and, against adolescents, as well (intimate partner: former spouse, spouse and boyfriend). This finding is

similar to other that of studies in the literature^{8,21-22} demonstrating that children and adolescents live daily with their aggressors, those who are responsible for protecting them. They also indicate a need to expand social protection networks, so as to break the cycle of violence and offer protection and care for children and adolescents.

For both children and adolescents, violent acts were repeated more often when there were two or more aggressors. The perpetrators of violence were mostly male, although males and females also participated jointly against children. This profile has been found in other studies examining recurrent violence against children²²

and adolescents²¹. The fact that violence is more often recurrent against females may explain the greater prevalence of male aggressors, in view of aspects of culture reflected in gender-based violence from an early age, revealing the domination of women in macho culture and the naturalisation of acts of violence from early childhood²². On the other hand, participation by both sexes as aggressors suggests parents' participating as a way of "educating" and "disciplining", resulting from adult-centric power-based relationships^{22,32}.

Note the positive association of recurrence with psychological violence against children and adolescents, neglect or abandonment of children and sexual violence against adolescents. Two previous studies that evaluated reports of violence in Brazil found positive associations between recurrence and psychological and sexual violence against children³⁵ and adolescents³⁰. Santos et al. (2018)³⁶ reported a higher proportion of recurrent sexual violence against adolescents, as found in this study. Studies have shown that neglect is one of the main types of violence practiced against children^{8,19,32,33,37} and its association with recurrence may relate to children's greater vulnerability to abuse, given their physical and emotional inability to react.

The most common means of attack were physical force against children and threats against children and adolescents, both of which were associated with repeated violence. This finding is similar to those of studies in Brazil using data from notifications of violence against adolescents from 2011 to 2017³⁰ and against children in 2012³⁸, where the means most used were physical force and threats.

It must be stressed that, given the complexity of the issue, the study findings may not reveal the real scenario of recurrent violence against children and adolescents, because of the many obstacles to the notification process, particularly in situations of violence, and more specifically non-fatal violence, involving these groups. Violence is still a taboo, framed by sociocultural constructions reflected in all societies. It is thus a complex social challenge to be met in all its various manifestations. In that context, this study can contribute to knowledge production, while at the same time exposing a problem sometimes invisible to those close to or providing care for children and adolescents.

The study findings show that violence occurs mainly in the family environment and that aggressors are people close to the victim. These facts represent the domestic sphere of the prob-

lem of violence against children and adolescents and, accordingly, the urgent need to implement strategies to combat such violence, given that this dimension has deep roots intertwined with sociocultural constructions that need to be reworked into a society conscious of all the harm done by violence at the individual, family and social levels. The literature also emphasises that, when violence occurs in the private space of the home, this gives rise to underreporting, protection of aggressors and silence from victims^{14,35,39}.

In this connection, underreporting of cases of violence and/or recurrent violence in the study group can be considered one limitation of this study, given that most cases occurred within the family, hindering access to disclosure or with victims possibly denying accusations for fear of being taken out of the family or of what may happen to them after reporting the event^{14,23,35,39}. Moreover, single-instance violence may be even more underreported, in that more recurrent violence may arouse in the victim the need to seek help. It is thus possible that the frequency of recurrent violence, in proportion to all cases of violence, may have been overestimated.

Another limitation relates to the comparison groups, because the group exposed to repeated violence was compared to victims of single-instance violence and not to children and adolescents who suffered no violence. It was also difficult to compare the study findings with those of other studies, because the literature on recurrent violence is still scarce and because it targets specific groups, such as women and/or children²¹.

Violence and, above all, recurrent episodes may be related to the naturalisation of violence, which accommodates violent acts against the more fragile, such as children and adolescents. In view of this, it is essential to give visibility to violence and confront it as a problem that can be avoided through more assertive and effective public policies. It is essential that, in addition to its being the duty of the state, the various forms of social organisation strive to assure the rights of children and adolescents.

In this regard, it is important to establish protection networks for victims in situations of violence and to expand the participation and integration of active subjects of at least the public security, public health, education and culture sectors. Care networks for victims of violence must be strengthened and also extend their care to the care personnel involved, who need preparation and proper conditions in which to perform their role in combating violence, without overwork or

fear of threats and impotence when diagnosing and referring victims.

By profiling victims, acts of violence, aggressors and factors associated with the recurrence of

violence, important contributions can be made to understanding violence against children and adolescents and local policies to prevent and control these problems can be properly directed.

Collaborations

SM Silva, ACS Andrade, FN Melanda and LR Oliveira contributed to the study design, data analysis and interpretation, drafting and critical review of the article. All authors were responsible for the final review and approval of the article.

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