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Results: The frequency of recurrent violence was 32.5%. In boys, it was associated with the child’s age (PR=1.38 – 95%CI 1.11;1.73) and the aggressor’s age (PR=1.85 – 95%CI 1.30;2.63) and occurrence at home (PR=1.61 – 95%CI 1.23;2.11); in girls, it was associated with age (PR=1.39 – 95%CI 1.20;1.60), presence of disabilities/disorders in the victim (PR=1.43 – 95%CI 1.22;1.67), abusive parents (PR=3.70 – 95%CI 1.65;8.32) and occurrence at home (PR=1.39 – 95%CI 1.10;1.75).

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Introduction

Children are among the groups most vulnerable to violence, due to their stage of development and their dependence on adult care and protection. The Brazilian Ministry of Health defines violence against children as ‘any acts or omissions by those responsible for them, as well as by society in general, that cause physical, emotional, sexual and moral harm to the victims’. In this age group, violence represents a threat to life and health, causes incalculable mental and emotional damage, which can endure and directly impact performance in adult life.

Situations of violence against children are usually characterized as recurring events. These experiences can be long-lasting and can leave invisible, immeasurable marks.

In 2018, external causes, including violence, were the leading cause of death in the Brazilian child population. According to the 2017 Viver Survey, around 8.0% of care provided in urgency and emergency services in Brazil country is due to violence against individuals aged 0 to 9 years. Regarding intra-family violence, 68.1% of cases are child victims: 62.7% of the male sex and 74.4% of the female sex.

Violence in childhood affects boys more than girls, and family members are the main aggressors. This aggression is a phenomenon contradictory to what would be expected, perpetrated mainly by members of the children’s circle of trust, people who should give love, affection and protection to those under their care and responsibility. According to the literature, this form of violence comes from those who have more contact or are closer to the child, and among the most common reasons and justifications are parents’ difficulties in relating to their children, using aggression as a way to educate, or being negligent in meeting the needs of childhood.

The fact that violence against children occurs mainly in the family environment makes it more difficult to recognize. Health professionals, especially those who work in Primary Care services of the Brazilian National Health System (SUS), play an essential role in identifying cases, being supportive to victims and their families and, therefore, they need to be aware of the family dynamics that may trigger violent acts.

Notification of cases of violence against children to the competent authorities has been mandatory since 1990, when the Statute of the Child and Adolescent came into force. To this end, the Ministry of Health developed the violence notification form, since violence has been a compulsorily notifiable health event since 2011. It is an indispensable instrument for providing due care to victims within the health care network, with the potential to guarantee the rights and social protection of children. The data recorded in the notification form, besides their quality being essential, must be permanently analyzed. They provide information that enables knowledge and adequate planning of intersectoral public policies on the subject.

The objective of this study was to identify the frequency of reported cases and factors associated with recurrent childhood violence in Espírito Santo State, Brazil.

Methods

This was a cross-sectional study, in which notified cases of recurring violence against children in Espírito Santo were analyzed for the period 2011 to 2018.

The state is located in the southeastern region of Brazil, its territorial extension is 46,074.444 km² and it is comprised of 78 municipalities and four health regions. According to Brazilian Institute of Geography and Statistics (IBGE) data for 2020, Espírito Santo has a high human development index (HDI=0.740) and average per capita income of BRL 1,477.00, which is higher than the national minimum wage. In 2019 it was estimated to have 4,018,650 inhabitants, of whom 509,336 were in the 0-9 year age group (14.5%).

The study included all records of notifications of violence against individuals aged 0-9 years, according to the classification criteria established by the World Health Organization (WHO) and used on the interpersonal and self-inflicted violence notification
The outcome of this analysis was recurrent violence (no; yes). This information was derived from the question about whether or not a notified case of violence had occurred previously. The independent variables analyzed were divided and categorized as follows:

a) Victim’s characteristics
- Age group (years: 0-2; 3-5; 6-9);
- Race/skin color (white; black/brown; yellow/indigenous);
- Any disability and/or disorder (no; yes);
- Zone of residence (urban/peri-urban; rural).

b) Aggressor’s characteristics
- Age group (years: 0-19; 20-24; 25 or over);
- Sex (male; female; both);
- Relationship with the victim (parents; acquaintances [family members or not]; strangers; the victim himself/herself);
- Suspected use of alcohol (no; yes).

c) Characteristic of aggression
- Number of aggressors involved (one; two or more);
- Place of occurrence (residence; other);
- Time of occurrence (morning/afternoon; night/early morning);
- Referral to other services i.e. health services, social services, police (no; yes).

The data derived from care provided by health services, recorded on the SINAN system notification form and made available by the Espírito Santo State Health Department. The choice of the period to be studied was due to the fact that, as of 2011, violence was included on the list of compulsorily notifiable health events when Ordinance GM/MS No. 104 came into force on January 25, 2011.

Prior to the data being analyzed, a process of qualification and correction of possible errors and inconsistencies in the records was undertaken, according to the guidelines contained in the Interpersonal and Self-Provoked Violence Notification Instruction. Cases with blank or unknown data were excluded from the analyses, which is why the total number of individuals varied according to the characteristic studied.

A descriptive analysis of the variables was performed using relative and absolute frequencies and 95% confidence intervals (95%CI). Pearson’s chi-square test was used for the bivariate inferential analysis, while Poisson regression was used for the multivariate analysis, both stratified by sex. In the multivariate model, prevalence ratios were calculated comparing the group exposed to recurring violence with the non-exposed group. "Backward" selection was used initially in the multivariate analysis: all variables having a p-value less than 0.20 in the bivariate analysis were included in the model; the exception was the ‘referral’ variable, as it was an event after the occurrence of the outcome. Variables were kept in the model according to the criterion of p less than 0.05; each time the model was run, the variable with the highest p value was removed, until all remaining variables showed association with recurrent violence (p≤0.05). All analyses were carried out using the Stata 14.1 software.

The study project was approved by the Human Research Ethics Committee of the Federal University of Espírito Santo Health Sciences Center: Certificate of Submission for Ethical Appraisal No. 88138618.0.0000.5060; Opinion No. 2.819.597, issued on August 14, 2018.

Results

Between 2011 and 2018, 3,127 cases of violence against children were reported in Espírito Santo: 817 (26.1%) were first-time cases of violence, 1,295 (41.4%) reported unknown data, and 1,015 (32.5%) accounted for recurrent violence.

With regard to the victims’ characteristics, we found a higher frequency of female children (60.1%), children in the 6-9 year age group (48.6%), black/brown race/skin color (69.5%), victims living in the urban/peri-urban zone (88.4%), children with no disabilities and/or disorders (93.9%). As for the aggressors, most were over 25 years of age (67.3%), males (56.2%), 69.9% were thought not to have consumed alcoholic beverages; the majority had a maternal/paternal relationship with the victim (64.4%). Generally, violence involved a single aggressor (75.0%), it occurred in the victim’s home (88.4%), in the morning or afternoon (67.5%), and the victim was referred to other services by the health service (93.3%) (Table 1).

In the bivariate analysis, for both sexes of the children involved, recurrent violence was associated with the age group of the victim and of the aggressor,
### Table 1 – Main characteristics of children suffering recurrent violence (N=1.015), their aggressors and acts of violence, Espirito Santo, Brazil, 2011-2018

| Characteristic                              | N  | %  | 95%CI     |
|---------------------------------------------|----|----|-----------|
| **Sex**                                     |    |    |           |
| Male                                        | 405| 39.9| 36.9;43.0|
| Female                                      | 610| 60.1| 57.1;63.1|
| **Victim’s age group (years)**              |    |    |           |
| 0-2                                         | 222| 22.2| 19.7;24.8|
| 3-5                                         | 293| 29.2| 26.5;32.1|
| 6-9                                         | 487| 48.6| 45.5;51.7|
| **Victim’s race/skin color**                |    |    |           |
| White                                       | 268| 29.6| 26.7;32.6|
| Black/brown                                 | 630| 69.5| 66.5;72.5|
| Yellow/indigenous                           | 8  | 0.9 | 0.4;1.8   |
| **Victim with disability and/or disorder**  |    |    |           |
| No                                          | 924| 93.9| 92.2;95.2|
| Yes                                         | 60 | 6.1 | 4.8;7.8   |
| **Victim’s zone of residence**              |    |    |           |
| Urban/peri-urban                             | 880| 88.4| 86.3;90.3|
| Rural                                       | 115| 11.6| 9.7;13.7  |
| **Aggressor’s age group (years)**           |    |    |           |
| 0-19                                        | 135| 21.5| 18.5;24.9|
| 20-24                                       | 70 | 11.2| 8.9;13.9  |
| ≥25                                         | 423| 67.3| 63.6;70.9|
| **Aggressor’s sex**                         |    |    |           |
| Male                                        | 553| 56.2| 53.1;59.3|
| Female                                      | 261| 26.5| 23.9;29.4|
| Both sexes                                  | 170| 17.3| 15.0;19.8|
| **Relationship between aggressor and victim**|    |    |           |
| Parents                                     | 631| 64.4| 61.3;67.3|
| Acquaintance                                | 321| 32.8| 29.9;35.8|
| Stranger                                    | 13 | 1.3 | 0.8;2.3   |
| The victim himself/herself                  | 15 | 1.5 | 0.9;2.5   |
| **Aggressor suspected of using alcohol**     |    |    |           |
| No                                          | 428| 69.9| 66.2;73.5|
| Yes                                         | 184| 30.1| 26.6;33.8|
| **Number of aggressors involved**           |    |    |           |
| One                                         | 735| 75.0| 72.2;77.6|
| Two or more                                 | 245| 25.0| 22.4;27.8|

a) The totals for absolute frequency differ due to missing data (data left blank or unknown, as recorded on the notification forms). b) 95%CI: 95% confidence interval.
Continuation

Table 1 – Main characteristics of children suffering recurrent violence (N=1,015), their aggressors and acts of violence, Espírito Santo, Brazil, 2011-2018

| Characteristic | N   | %   | 95%CI | a  |
|----------------|-----|-----|-------|----|
| Other          | 111 | 11.6| 9.7;13.7|    |
| Residence      | 850 | 88.4| 86.3;90.3|    |
| **Time of occurrence** |    |     |       |    |
| Morning/afternoon | 339 | 67.5| 63.7;71.5|    |
| Night/early morning | 163 | 32.5| 28.5;36.7|    |
| **Referral to other services** |    |     |       |    |
| No             | 68  | 6.7 | 5.4;8.5 |    |
| Yes            | 941 | 93.3| 91.5;94.7|    |

a) The totals for absolute frequency differ due to missing data (data left blank or unknown, as recorded on the notification forms); b) 95%CI: 95% confidence interval.

Table 2 – Distribution of the characteristics of children suffering recurrent violence (N=3,127), their aggressors and acts of violence, stratified by sex, Espírito Santo, Brazil, 2011-2018

| Characteristic                              | Male                                        | Female                                       |
|---------------------------------------------|---------------------------------------------|----------------------------------------------|
|                                             | n   | %   | 95%CI | p-value| n   | %   | 95%CI | p-value |
| Victim's age group (years)                  |     |     |       |       |     |     |       |        |
| 0-2                                         | 95  | 41.5| 35.3;48.0 | 0.001| 127 | 47.6| 41.6;53.6 | <0.001|
| 3-5                                         | 127 | 58.3| 51.6;64.7 |       | 166 | 56.7| 50.9;62.2 |        |
| 6-9                                         | 177 | 54.6| 49.2;60.0 |       | 310 | 64.3| 59.9;68.5 |        |
| Victim's race/skin color                    |     |     |       |       |     |     |       |        |
| White                                       | 95  | 49.2| 42.2;56.3 | 0.026| 173 | 60.9| 55.1;66.4 | 0.406|
| Black/brown                                 | 254 | 53.9| 49.4;58.4 |       | 376 | 56.7| 52.9;60.5 |        |
| Yellow/indigenous                           | 1   | 11.1| 1.4;53.2 |       | 7   | 50.0| 25.2;74.8 |        |
| Victim with disability and/or disorder      |     |     |       |       |     |     |       |        |
| No                                          | 364 | 50.8| 47.1;54.4 | 0.115| 560 | 56.9| 53.8;60.0 | 0.002|
| Yes                                         | 26  | 63.4| 47.6;76.8 |       | 34  | 81.0| 66.1;90.3 |        |
| Victim's zone of residence                  |     |     |       |       |     |     |       |        |
| Urban/peri-urban                             | 339 | 50.5| 46.7;54.2 | 0.041| 541 | 57.7| 54.5;60.9 | 0.508|
| Rural                                       | 58  | 61.7| 51.5;71.0 |       | 57  | 61.3| 51.0;70.7 |        |
| Aggressor's age group (years)                |     |     |       |       |     |     |       |        |
| 0-19                                        | 65  | 49.2| 40.8;57.8 | <0.001| 70  | 49.0| 40.8;57.1 | <0.001|
| 20-24                                       | 23  | 33.3| 23.2;45.3 |       | 47  | 59.5| 48.3;69.8 |        |
| ≥25                                         | 162 | 66.4| 60.2;72.1 |       | 261 | 70.7| 65.9;75.2 |        |
| Aggressor's sex                              |     |     |       |       |     |     |       |        |
| Male                                        | 198 | 50.5| 45.6;55.5 | 0.217| 355 | 56.5| 52.6;60.4 | 0.009|
| Female                                      | 123 | 54.9| 48.3;61.3 |       | 138 | 62.2| 55.6;68.3 |        |
| Both sexes                                  | 72  | 59.0| 50.0;67.4 |       | 98  | 70.0| 61.9;77.0 |        |
| Relationship between aggressor and victim   |     |     |       |       |     |     |       |        |
| Parents                                     | 268 | 60.4| 55.7;64.8 | <0.001| 363 | 70.6| 66.5;74.4 | <0.001|
| Acquaintance                                | 107 | 43.0| 36.9;49.2 |       | 214 | 50.2| 45.5;55.0 |        |
| Stranger                                    | 8   | 19.5| 10.0;34.7 |       | 5   | 14.7| 6.2;31.2 |        |
| The victim himself/herself                  | 10  | 52.6| 30.6;73.7 |       | 5   | 33.3| 14.1;60.3 |        |

a) 95%CI: 95% confidence interval.

To be continued
Table 2 – Distribution of the characteristics of children suffering recurrent violence (N=3,127), their aggressors and acts of violence, stratified by sex, Espírito Santo, Brazil, 2011-2018

| Characteristic                              | Male          |          |         | Female        |          |         |
|---------------------------------------------|---------------|----------|---------|---------------|----------|---------|
|                                             | n             | %        | 95%CI   | p-value       | n         | %        | 95%CI   | p-value |
|                                             |               |          |         |               |           |          |         |         |
| Aggressor suspected of using alcohol        |               |          |         |               |           |          |         |         |
| No                                         | 172           | 46.5     | 41.4;51.6 | <0.001       | 256       | 55.4     | 50.8;59.9 | 0.001   |
| Yes                                        | 79            | 66.4     | 57.4;74.3 |              | 105       | 71.0     | 63.1;77.7 |         |
| Number of aggressors involved               |               |          |         |               |           |          |         |         |
| One                                        | 286           | 53.2     | 48.9;57.4 | 0.554        | 449       | 58.9     | 55.4;62.4 | 0.219   |
| Two or more                                | 104           | 50.7     | 43.9;57.6 |              | 141       | 63.5     | 57.0;69.6 |         |
| Place where violence occurred               |               |          |         |               |           |          |         |         |
| Other                                       | 63            | 33.2     | 26.8;40.2 | <0.001       | 48        | 35.8     | 28.1;44.3 | <0.001  |
| Residence                                  | 322           | 59.0     | 54.8;63.0 |              | 528       | 61.8     | 58.4;65.0 |         |
| Time of occurrence                          |               |          |         |               |           |          |         |         |
| Morning/afternoon                           | 135           | 46.4     | 40.7;52.2 | 0.476        | 204       | 56.4     | 51.2;61.4 | 0.929   |
| Night/early morning                         | 55            | 42.6     | 34.3;51.4 |              | 108       | 56.0     | 48.9;62.8 |         |
| Referral to other services                  |               |          |         |               |           |          |         |         |
| No                                          | 28            | 38.9     | 28.3;50.7 | 0.020        | 40        | 47.6     | 37.1;58.3 | 0.044   |
| Yes                                         | 377           | 53.3     | 49.6;56.9 |              | 564       | 58.9     | 55.8;62.0 |         |
| a) 95%CI: 95% confidence interval.          |               |          |         |               |           |          |         |         |

Table 3 – Prevalence ratios and respective confidence intervals for recurring violence among boys (n=1,358) according to independent variables, Espírito Santo, Brazil, 2011-2018

| Variable                                      | Crude analysis | Adjusted analysis |
|-----------------------------------------------|----------------|-------------------|
|                                               | PR<sup>a</sup> | 95%CI             | p-value | PR<sup>a</sup> | 95%CI | p-value |
| Victim's age group (years)                    |               |                   |         |               |       |         |
| 0-2                                           | 1.00           | 0.002              |         | 1.00           | 0.017 |         |
| 3-5                                           | 1.40           | 1.16;1.70          | 0.017   | 1.32           | 1.04;1.68 | 0.017   |
| 6-9                                           | 1.32           | 1.10;1.58          | 0.017   | 1.38           | 1.11;1.73 | 0.017   |
| Victim's race/skin color                      |               |                   |         |               |       |         |
| White                                         | 4.43           | 0.69;28.31         | 0.144   | 2.31           | 0.49;11.02 | 0.238   |
| Black/brown                                   | 4.85           | 0.76;30.9          | 0.238   | 2.67           | 0.56;12.64 | 0.238   |
| Yellow/indigenous                             | 1.00           | 1.00               | 0.238   | 1.00           | 1.00   | 0.238   |
| Victim with disability and/or disorder        |               |                   |         |               |       |         |
| No                                            | 1.00           | 0.073              |         | 1.00           | 0.085 |         |
| Yes                                           | 1.25           | 0.98;1.59          | 0.085   | 1.24           | 0.97;1.58 | 0.085   |
| Victim's zone of residence                    |               |                   |         |               |       |         |
| Urban/peri-urban                               | 1.00           | 0.025              | 0.085   | 1.00           | 0.025 | 0.085   |
| Rural                                         | 1.22           | 1.03;1.46          | 0.085   | 1.01           | 0.80;1.28 | 0.085   |
| Aggressor's age group (years)                  |               |                   |         |               |       |         |
| 0-19                                          | 1.48           | 1.01;2.15          | 0.085   | 1.41           | 0.96;2.08 | 0.085   |
| 20-24                                         | 1.00           | 1.00               | 0.085   | 1.00           | 1.00   | 0.085   |
| ≥25                                           | 1.99           | 1.41;2.82          | 0.085   | 1.85           | 1.30;2.63 | 0.085   |
| a) PR: prevalence ratio; b) 95%CI: 95% confidence interval. |   |                   |         |               |       |         |

To be continued
### Table 3 — Prevalence ratios and respective confidence intervals for recurring violence among boys (n=1,358) according to independent variables, Espírito Santo, Brazil, 2011-2018

| Variable                                      | Crude analysis | Adjusted analysis |
|-----------------------------------------------|----------------|------------------|
|                                              | PR  | 95%CI | p-value | PR  | 95%CI | p-value |
| Relationship between aggressor and victim     |     |       |         |     |       |         |
| Parents                                       | 3.09 | 1.65;5.79 | <0.001 | 1.05 | 0.36;3.09 | 0.997 |
| Acquaintance                                  | 2.20 | 1.16;4.17 | 1.01   | 0.34;3.06 |
| Stranger                                      | 1.00 | 1.00   |         | 1.00 | 1.00   |         |
| The victim himself/herself                    | 2.70 | 1.27;5.74 | 1.06   | 0.30;3.73 |
| Aggressor suspected of using alcohol          |     |       |         |     |       |         |
| No                                            | 1.00 | <0.001 |         | 1.00 | 0.066  |
| Yes                                           | 1.43 | 1.21;1.69 | 1.21   | 0.99;1.47 |
| Place where violence occurred                 |     |       |         |     |       |         |
| Other                                         | 1.00 | <0.001 |         | 1.00 | 0.001  |
| Residence                                     | 1.78 | 1.44;2.20 | 1.61   | 1.23;2.11 |

a) PR: prevalence ratio; b) 95%CI: 95% confidence interval.

### Table 4 — Prevalence ratios and respective confidence intervals for recurring violence among girls (n=1,769) according to independent variables, Espírito Santo, Brazil, 2011-2018

| Variable                                      | Crude analysis | Adjusted analysis |
|-----------------------------------------------|----------------|------------------|
|                                              | PR  | 95%CI | p-value | PR  | 95%CI | p-value |
| Victim's age group (years)                    |     |       |         |     |       |         |
| 0-2                                           | 1.00 | <0.001 |         | 1.00 | <0.001 |
| 3-5                                           | 1.19 | 1.01;1.40 | 1.22   | 1.04;1.43 |
| 6-9                                           | 1.35 | 1.17;1.56 | 1.39   | 1.20;1.60 |
| Victim with disability and/or disorder        |     |       |         |     |       |         |
| No                                            | 1.00 | <0.001 |         | 1.00 | <0.001 |
| Yes                                           | 1.42 | 1.22;1.66 | 1.43   | 1.22;1.67 |
| Aggressor's age group (years)                 |     |       |         |     |       |         |
| 0-19                                          | 1.00 | <0.001 |         | 1.00 | 0.327  |
| 20-24                                         | 1.22 | 0.95;1.56 | 1.04   | 0.79;1.38 |
| ≥25                                           | 1.45 | 1.21;1.73 | 1.15   | 0.93;1.43 |
| Aggressor's sex                                |     |       |         |     |       |         |
| Male                                          | 1.00 | 0.004  |         | 1.00 | 0.151  |
| Female                                        | 1.10 | 0.97;1.24 | 1.11   | 0.98;1.26 |
| Both sexes                                    | 1.24 | 1.09;1.41 | 1.12   | 0.98;1.28 |
| Relationship between aggressor and victim     |     |       |         |     |       |         |
| Parents                                       | 4.80 | 2.13;10.82 | <0.001 | 3.70 | 1.65;8.32 | <0.001 |
| Acquaintance                                  | 3.42 | 1.51;7.72 | 2.49   | 1.10;5.64 |
| Stranger                                      | 1.00 | 1.00   |         | 1.00 | 1.00   |         |
| The victim himself/herself                    | 2.27 | 0.77;6.68 | 1.81   | 0.65;5.07 |

a) PR: prevalence ratio; b) 95%CI: 95% confidence interval.

To be continued
Recurrent violence against children in Espírito Santo

the victim’s relationship with the aggressor, the aggressor being suspected of using alcohol, besides the place of occurrence. Among male children, recurrence of the offense was also related to race/skin color and the victim’s zone of residence; while among female children, it was related to the victim having a disability and/or disorder, and the aggressor’s sex (p<0.05) (Table 2).

Recurrent violence against boys was higher among those who were 6 to 9 years old (PR=1.38 - 95%CI 1.11;1.73), compared to those aged 0 to 2 years. Recurrent violence against boys was also more frequent among aggressors aged 25 years or older (PR=1.85 - 95%CI 1.30;2.63), compared to those aged 20 to 24 years, and violence occurred most frequently at home (PR=1.61 - 95%CI 1.23;2.11) (Table 3).

Following adjustments, girls who were 6 to 9 years old were more likely to experience recurrent violence (PR=1.39 - 95%CI 1.20;1.60), compared to those aged 0 to 2 years. Recurrent violence was also more prevalent against girls with disabilities and/or disorders (PR=1.45 - 95%CI 1.22;1.67), compared to those who did not have this condition. Parents were the main aggressors (PR=3.70 - 95%CI 1.65;8.32) of girls, as well as people they knew (PR=2.49 - 95%CI 1.10;5.64), when compared to strangers. Most recurrent violence against girls occurred at home (PR=1.39 - 95%CI 1.10;1.75) (Table 4).

**Discussion**

Recurrent violence was present in practically one third of the cases reported in the state of Espírito Santo in the period analyzed, in addition to being practiced mainly against older children (6 to 9 years), by people close to them and in their own homes.
In this study, recurrent violence was more prevalent in the 6-9 year age group in both genders. Regarding this variable, studies differ on which age group is the most affected, and this also depends on the type of violence suffered: negligence usually affects younger children, while physical and sexual violence affects older children.23

The need for special and continuous care, as occurs in children with disabilities and/or disorders, revealed itself to be a factor of vulnerability for the occurrence of violence, both in this study and in others.24 One of them, which had a cross-sectional focus and analyzed data on 270 children with disabilities cared for at a hospital in the city of Rio de Janeiro between 2012 and 2013, found frequencies of 83.7% for psychological aggression and 84.4% for physical abuse.25 Their authors point out that the difficult children with a variety of disabilities have in expressing themselves verbally and the ambiguity caused by the fact that the aggressor is the person in charge of taking care of them, can be an aggravating factor for identification of this violence, predisposing these children to even more repetition of these forms of aggression.25

Returning to our study, most situations of recurring violence occurred at home, with expressively higher frequencies in both genders. This finding is all the more contradictory when the home, imagined as the locus of protection and safety during childhood, becomes a space for the expression and reproduction of power of the adult over the child, culminating in situations of violence.18 Children spend most time at home, especially younger children, which contributes to the predominance of violence against them.17,26 Several authors highlight that violence against children in the private space of their home contributes to underreporting of cases, favoring the protection of aggressors and the silence of victims.19,27,28 Home is also the main place of violence against children, as shown both by the literature, and also by the SINAN system, the data of which show frequency of violence in this family space varying from 49.6% in a Health Region in the state of Minas Gerais to 77.0% in the state of Paraíba.17,27

This study found that parents are the main perpetrators of recurrent violence. This finding, common to other studies,12,16,18,23 shows the reality of a child living every day with its aggressor(s), who are precisely those responsible for the fundamental role of protecting and educating them. Thus, the expected family relationship of disposition and practice of love and care by parents towards their children is distorted.17,27,28 One of the explanations for this result would be parents’ behavior when they resort to punishments, threats and physical aggression as a way to “educate” and ”discipline” their children based on relationships established in the shadow of an adult-centric power hierarchy, instead of opening up to dialogue as a way of understanding the complexity and solving the conflict situations involved in the dynamics of childhood education and preparation for adulthood.16,17,19,29

Parental violence against children may be a consequence of the way children were treated in their childhood, reproducing long-standing upbringing patterns from generation to generation.20,29 Structural violence itself, present in society or in the environment where families live, and the social vulnerability to which they are exposed, such as difficulties in accessing income, housing and other social rights, also contribute to the occurrence of interpersonal violence, especially against the most vulnerable, who are almost always children.5 Such situations generate a great deal of stress and worry among family members, who end up taking it out on the child. Moreover, the aggressor counts on the complicity of family members when they fail to denounce him and/or protect the child victim.50 This idea is part of a misunderstanding, present in society: that one should not interfere in what happens in the private sphere of the home, even if there are rights violations and direct violence against those who live there.19

Among the limitations of the study is the underreporting of cases of violence when working with data from information systems such as the SINAN system, as cases reported on the system are those attended to and identified as violence by health service professionals. Many acts of violence against children happen without the knowledge of the Health sector and are consequently not notified. Therefore, they are not included in the data analyzed in this study. It is also important to note, among the limitations of this study, the difficulties inherent to the use of secondary data and their accuracy and completeness. In this sense it is necessary to constantly improve the surveillance process and the continuing training of health
professionals in the proper characterization of cases and the correct completion of the notification form.

Recurrent violence suffered by children was considerably frequent among the reports of violence observed, and was more prevalent among female and children in the 6-9 year age group. It occurs mainly at home, a privileged space for coexistence during childhood, with parents as the main aggressors. This ends up exposing victims to a perverse cycle of violence, a source of trauma and suffering for life. These occurrences must be identified correctly and early, so that children have their rights guaranteed, are - and feel - protected from any form of violence as they grow up and develop, until they achieve autonomy and live a healthier and happier adult life.

Authors’ contributions

Pedroso MRO and Leite FMC contributed to the concept and design of the study, analysis and interpretation of the results, drafting and approving the final version of the manuscript. Both authors are responsible for all aspects of this study, including the guarantee of its accuracy and integrity.

References

1. World Health Organization. World report on child injury prevention [Internet]. Geneva: WHO; 2008 [acesso 3 jun. 2020]. 232 p. Disponível em: https://apps.who.int/iris/bitstream/handle/10665/43851/9789241563574_eng.pdf?sequence=1
2. Ministério da Saúde (BR). Secretaria de Políticas de Saúde. Violência intrafamiliar: orientações para prática em serviço. [Internet]. Brasília, DF: MS; 2001 [acesso 3 jun. 2020]. 94 p. (Cadernos de atenção básica n. 8). Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/violencia_intrafamiliar_cab8.pdf
3. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Linha de cuidado para a atenção integral à saúde de crianças, adolescentes e suas famílias em situação de violências: orientação para gestores e profissionais de saúde [Internet]. Brasília, DF: MS; 2010 [acesso 3 jun. 2020]. 104 p. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/linha_cuidado_crianças_familias_violencias.pdf
4. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Análise em Saúde e Vigilância de Doenças Não Transmissíveis. VIVA Inquérito 2017: vigilância de violência e acidentes em serviços sentinelas de urgência e emergência: capitais e municípios [Internet]. Brasília, DF: MS; 2019 [acesso 3 jun. 2020]. Disponível em: http://portalrquivo2.saude.gov.br/images/pdf/2019/dezembro/05/viva-inquerito-2017.pdf
5. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, editors. World report on violence and health [Internet]. Geneva: WHO; 2002 [acesso 3 jun. 2020]. 360 p. Disponível em: https://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf?sequence=1
6. Mascarenhas MDM, Malta DC, Silva MMA, Lima CM, Carvalho MGO, Oliveira VLA. Violência contra a criança: revelando o perfil dos atendimentos em serviços de emergência, Brasil, 2006 e 2007. Cad Saude Publica. 2010 [acesso 3 jun 2020]; 26(2):347-57. doi: http://dx.doi.org/10.1590/S0102-311X2010000200013.
7. Hamilton LHA, Jaffe PG, Campbell M. Assessing children’s risk for homicide in the context of domestic violence. J Fam Violence. 2013 [acesso 3 jun. 2020]; 28(2):179-89. doi: http://dx.doi.org/10.1007/s10896-012-9473-x.
8. Nunes AJ, Sales MCV. Violência contra crianças no cenário brasileiro. Gen Saude Colet. 2016;21(3):871-80. doi: http://dx.doi.org/10.1590/1413-81232015213.08182014.
9. Brasil. Lei nº 8.069, de 13 de julho de 1990. Dispõe sobre o estatuto da criança e do adolescente [Internet]. Brasília, DF: Diário Oficial da União; 14 jul. 1990 [acesso 3 jun. 2020]. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/l8069.htm
10. Ministério da Saúde (BR). Portaria nº 104, de 25 de janeiro de 2011. Define as terminologias adotadas em legislação nacional, conforme o disposto no regulamento sanitário internacional 2005 (RSI 2005), a relação de doenças, agravos e eventos em saúde pública de notificação compulsória em todo o território nacional e estabelece fluxo, critérios, responsabilidades e atribuições aos profissionais...
11. Ministério da Saúde (BR). Política nacional de redução da morbimortalidade por acidentes e violências [Internet]. 2 ed. Brasília, DF: MS; 2005 [acesso 3 jun. 2020]. 63 p. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/politica_reducao_morbimortalidade_acidentes_2ed.pdf

12. Oliveira NE, Moraes CL, Junger WI, Reichenheim ME. Violência contra crianças e adolescentes em Manaus, Amazonas: estudo descritivo dos casos e análise da completude das fichas de notificação, 2009-2016. Epidemiol Serv Saude. 2020;29(1):e2018438. doi: http://dx.doi.org/10.5123/s1679-49742020001000012.

13. Ministério da Saúde (BR). Secretaria de Assistência à Saúde. Notificação de maus-tratos contra crianças e adolescentes pelos profissionais de saúde: um passo a mais na cidadania em saúde [Internet]. Brasília, DF: MS; 2002 [acesso 3 jun. 2020]. 49 p. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/notificacao_maustratos_criancas_adolescentes.pdf

14. Instituto Brasileiro de Geografia e Estatística. Cidades: panorama Espírito Santo [Internet]. 2020. Rio de Janeiro: IBGE; 2020 [acesso 20 mai. 2020]. Disponível em: https://cidades.ibge.gov.br/brasil/es/panorama

15. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Vigilância de Doenças e Agravos Não Transmissíveis e Promoção da Saúde. Viva: Instrutivo de notificação de violência interpessoal e autoprovocada [Internet]. 2a ed. Brasília, DF: MS; 2016 [acesso 3 jun. 2020]. 94 p. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/viva_instrutivo_violencia_interpessoal_autoprovocada_2ed.pdf

16. Figueiredo MC, Rocha RM, Melgar XC. Prevalência de niños víctimas de violencia en la ciudad de Porto Alegre e influencia de sus variables en el ámbito odontológico. Odontoestomatología. 2018;20(32):32-41. doi: http://dx.doi.org/10.22592/ode2018n32a4.

17. Souto DF, Zanin L, Ambrosano MB, Flório FM. Violência contra crianças e adolescentes: perfil e tendências decorrentes da lei nº 13.010. Rev Bras Enferm. 2018;71(supl. 3):1237-46. doi: http://dx.doi.org/10.1590/0034-7167-2017-0048.

18. Farias MS, Souza CS, Carneseca EC, Passos ADC, Vieira EM. Caracterização das notificações de violência em crianças no município de Ribeirão Preto, São Paulo, no período 2006-2008. Epidemiol Serv Saude. 2016;25(4):799-806. doi: http://dx.doi.org/10.5123/s1679-49742016000400013.

19. Ferreira CLS, Górtez MCJW, Gontijo ED. Promoção dos direitos da criança e prevenção de maus tratos infantis. Cien Saude Colet. 2019;24(11):3997-4008. doi: http://dx.doi.org/10.1590/1413-8123201811.04352018.

20. Silva PA, Lunardi VL, Lunardi GL, Arejano CB, Ximenes AS, Ribeiro JP. Violência contra crianças e adolescentes: características dos casos notificados em um Centro de Referência do Sul do Brasil. Enferm Glob. 2017;(46):419-31. doi: http://dx.doi.org/10.6018/eglobal.16.2.235251.

21. Guimarães I. Violência de gênero. In: Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Violência faz mal à saúde [Internet]. Brasília, DF: MS; 2006 [acesso 5 jun. 2020]. p. 105-109. Disponível em: http://bibliotecadigital.puc-campinas.edu.br/services/e-books-MS/06_0315_M.pdf

22. Evangelista García AA. Normalización de la violencia de género cómo obstáculo metodológico para su comprensión. Nómadas. 2019;(51):85-97. doi: http://dx.doi.org/10.30578/nomadas.n51a5.

23. Malta DC, Bernal RTI, Teixeira BSM, Silva MMA, Freitas MIF. Fatores associados a violências contra crianças em Serviços Sentinelas de Urgências nas capitais brasileiras. Cien Saude Colet. 2017;22(9):2889-98. doi: http://dx.doi.org/10.1590/1413-81232017229.12752017.

24. Jones L, Bellis MA, Wood S, Hughes K, McCoy E, Eckley L, et al. Prevalence and risk of violence against children with disabilities: a systematic review and meta-analysis of observational studies. Lancet. 2012;380(9845):899-907. doi: http://dx.doi.org/10.1016/S0140-6736(12)60692-8.

25. Barros ACMW, Deslandes SF, Bastos OM. A violência familiar e a criança e o adolescente com deficiências. Cad Saude Publica. 2016;32(6):e00090415. doi: http://dx.doi.org/10.1590/0102-311X00090415.

26. Rates SMM, Melo EM, Mascarenhas MDM, Malta DC. Violência infantil: uma análise das notificações compulsórias, Brasil 2011. Cien Saude Colet. 2015;20(3):655-65. doi: http://dx.doi.org/10.1590/1413-8123201520.15242014.

27. Sousa RP, Oliveira FB, Bezerra MLO, Leite ES, Maciel EJS. Caracterização dos maus-tratos contra a criança: análise das notificações compulsórias na Paraíba. Rev Espac Saude. 2015;20(3):65-72. doi: https://doi.org/10.22592/1517-7130.2015v20n3p20.

28. Fornari LE, Sakata-So KN, Egry EY, Fonseca RMGS. As perspectivas de gênero e geração nas narrativas
Recurrent violence against children in Espírito Santo

29. Hino P, Takahashi RF, Nichiata LYI, Apostólico MR, Taminato M, Fernandes H. As interfaces das dimensões da vulnerabilidade face à violência contra a criança. Rev Bras Enferm. 2019;72(supl 3):343-7. doi: http://doi.org/10.1590/0034-7167-2018-0463.

30. Garbin CAS, Gomes AMP, Gatto RCJ, Garbin AJI. Um estudo transversal sobre cinco anos de denúncia sobre violência contra crianças e adolescentes em Araçatuba. São Paulo. J Health Sci. 2016;18(4):273-7. doi: https://doi.org/10.17921/2447-8938.2016v18n4p273-7.