The incidence of sexual violence among children and adolescents in Recife, State of Pernambuco, Brazil, in 2012 and 2013

Cláudia Alves de Sena ¹ Maria Arleide da Silva ¹ Gilliatt Hanois Falbo Neto ¹

> **Abstract** The scope of this study was to establish the incidence of sexual violence against children and adolescents in Recife, State of Pernambuco (Brazil) between 2012 and 2013. Data was collected from the records of rape examination reports carried out at the Recife Institute of Forensic Medicine. Of the 867 cases recorded, 328 of the victims were children and adolescents. An incidence of 3.67 cases per 10,000 inhabitants in the 0 to 18 age range was identified. The majority of the victims were female (92.1%) between 10 and 14 years of age (59.2%). In two thirds of the cases, rape was the most frequent type of sexual abuse and the majority of perpetrators were known to the victim (57.8%). An association between the type of sexual violence and the age and sex of the victim and perpetrator (p < 0.001) was determined. The most common type of sexual violence was rape among adolescents and sexual abuse not involving rape among children. The cases of sexual violence against children and adolescents shown in this study increase the visibility of this serious health problem and the need for preventive public policies.

> **Key words** Violence, Sexual violence, Children, Adolescents, Incidence

¹ Instituto de Medicina Integral Prof. Fernando Figueira. R. dos Coelhos 300, Boa Vista. 50070-550 Recife PE Brasil. claudia.sena@upe.br

Introduction

Violence is a complex phenomenon that has been experienced culturally throughout history and is considered a global public health problem¹. Children and adolescents are among the groups most vulnerable to violence, and their physical, emotional and financial dependence on their parents or guardians contributes to the low visibility of the real magnitude of this problem¹.

Data from the United Nations (UN) show that more than 80% of the two billion children worldwide experience physical punishment, with one-third of these punishments considered very serious, and approximately 53,000 children die each year as a result of this violence. An estimated 225 million children worldwide are sexually abused each year, of whom 150 million are female².

Worldwide, 120 million girls and boys under 20 years of age have been forced to have sex or to engage in other sexual acts, and one in three adolescents aged 15 to 19 years are married and are victims of psychological, physical or sexual violence perpetrated by their husbands or partners³.

In Switzerland, a national study that included adolescents of both sexes aged 15-17 years found that 22% of girls and 8% of boys had experienced at least one incident of sexual violence involving physical contact³.

In Brazil, violence is the fourth most common external cause of death in children from zero to nine years of age and accounts for 52.9% of deaths among adolescents in the 10-19-year-old age group, followed by traffic accidents (25.9%) and drownings (9.0%)⁴. Data from the Violence and Accident Surveillance System (VIVA) from 2006-2007 evidenced sexual violence as the main cause of visits to violence referral services, with 1939 records of violence against children during that period, 44.0% (845) of which corresponded to cases of sexual violence in children from zero to 9 years of age. Females were the most frequent victims, corresponding to 60% of the total number of recorded and confirmed cases⁴.

In northeastern Brazil, studies on sexual violence in children and adolescents conducted in Aracajú/Sergipe⁵, São Luís/Maranhão⁶ and Maceió/Alagoas⁷ found that most victims were female (73-79%). In Pernambuco, data from the Department of Social Defence showed 16,527 reported cases of violence in 2005/2008, 12.5% of which were sexual crimes. Of these cases, 44.4% of the victims were between zero and 12 years of age, 33.9% were between 12 and 15 years of age and 21.7% were between 15 and 18 years of age⁸.

This phenomenon is perplexing and mobilizes society due to its magnitude, wide exposure and the vulnerability of the minors and the fact that it transcends different social environments. Thus, the present study aimed to identify the incidence of sexual violence against children and adolescents in Recife/Pernambuco during the 2012-2013 period.

Methods

This study was a descriptive, retrospective study that included secondary data from cases of sexual violence against children and adolescents registered at the Antônio Persivo Cunha Institute of Forensic Medicine (IMLAPC) from 1 January, 2012, to 31 December, 2013.

The study population consisted of children (≤11 years of age) and adolescents (12-18 years of age)9 of both sexes who underwent a rape examination to investigate sexual crimes. The characterization of sexual crimes adopted in the Brazilian Penal Code classifies sexual abuse into the following two groups: rape (seduction or rape) and sexual abuse not involving rape (violent indecent exposure)10. In this study, the categorization of variables related to sexual violence refers to sexual violence confirmed by rape examination by a competent authority (IMLAPC). The variable rape included confirmed cases of sexual violence with rape and anal intercourse, and the variable sexual abuse not involving rape also included indecent touching according to the classification in the IMLAPC expert reports.

The instrument used for data collection was a form prepared based on the official document used for the IMLAPC expert reports that included the following variables: year and month of occurrence, age group, sex, ethnicity, disability, origin, presence of violence, type of aggression, relationship/degree of kinship with the victim, sex of the perpetrator and variables related to the type of sexual violence suffered and confirmed by the expert report.

Data were collected from the IMLAPC records for 2012 and 2013 during the period from April to August of 2014. A total of 2944 expert reports of sexual violence in children and adolescents were identified, of which 867 were from the city of Recife. The final sample of the present study was 328 records of confirmed cases of sexual violence.

Data were entered into the public domain software package Epi-Info 3.5.3 and then ana-

lysed using simple and relative frequency measures. The coefficients of the incidence of sexual violence were calculated according to sex, age group of victims and year of occurrence. The population estimated for the victims and residents in the city of Recife in the same age group during the study period was used to calculate the incidence; the incidence was expressed as the number of cases per 10,000 inhabitants. To construct the thematic map, the incidence rate was distributed by neighbourhoods and stratified into tertiles considering neighbourhoods with at least one recorded and confirmed case of violence. To assess the association between variables and the types of sexual violence, Pearson's Chisquare test and Fisher's exact test were used when applicable. The statistical significance adopted for the tests was 5% (p<0.05), and STATA software version 12.0 was used.

The data collection was approved by the Department of Social Defence/State of Pernambuco (SDS/PE), and the study was approved by the Human Research Ethics committee of the Prof. Fernando Figueira Institute of General Medicine (IMIP).

Results

A total of 328 confirmed records of child and adolescent victims of sexual violence from 2012 to

2013 were included in this study. The incidence rate of sexual violence during that period was 3.67/10,000 inhabitants in the age group from 0 to 18 years, with rates of 3.93/10,000 inhabitants in 2012 and 3.4/10,000 inhabitants in 2013. The highest incidence of sexual violence was observed in the 10-14-year-old age group. (Figure 1)

The results showed that the months of February, April, September and October presented a higher occurrence of cases of sexual violence against children and adolescents in Recife/PE in 2012/2013. In 2012, the number of cases/month ranged from 10 to 21, with higher frequencies in September, October and December. In 2013, the frequency of cases was higher in all months of the year with the exception of June, with a range from 6 to 22 cases; the highest frequency was observed in February (Figure 2).

The spatial distribution of the cases that occurred during the study period according to the neighbourhood of residence of the abused child or adolescent showed a higher incidence of sexual violence in neighbourhoods of Sanitary Districts II and III, with more than 5.71 victims per neighbourhood (Figure 3).

During the two years studied, most cases reported were children and adolescents between the ages of 10 and 14 years (59.2%), with a predominance of female victims (92.1%). Regarding the type of sexual violence, 75.9% were cases of violence with rape, and 24.1% were those who

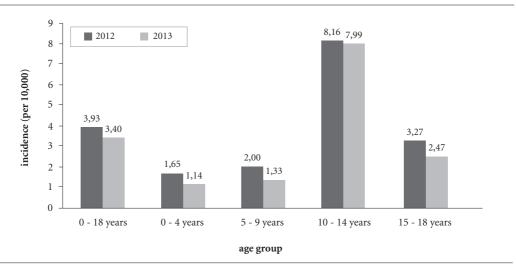


Figure 1. Incidence of cases of sexual violence against children and adolescents in the municipality of Recife/PE in 2012 and 2013.

Source: Primary data from the rape examination reports of IMLAPC-PE2012-2013.

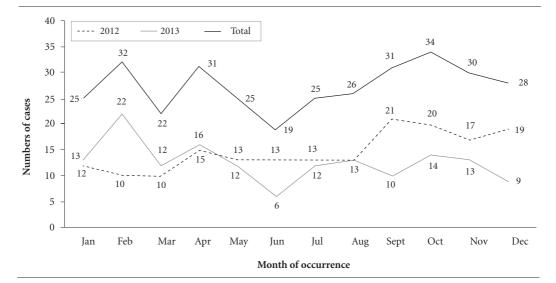


Figure 2. Distribution of cases of sexual violence against children and adolescents in the municipality of Recife in 2012 and 2013 according to the month of occurrence.

Source: Primary data from the rape examination reports of IMLAPC- 2012-2013.

suffered sexual abuse not involving rape. The most frequent perpetrator was an acquaintance (47.2%) and in 25.0% of cases was a family member (Table 1).

The associations between the types of sexual violence and the sociodemographic characteristics and the perpetrator were significant. Rape was significant (p < 0.001) when associated with the age group between 10 and 14 years old, female sex (95.6%) and an acquaintance of the victim, and sexual abuse not involving rape (p < 0.001) was positively associated with the 5-9-year-old age group, female sex and a family member as the most frequent perpetrator (92.1%) (Table 2).

Discussion

The 328 cases of sexual violence included in this study were confirmed through forensic expert reports, which according to Drezzet et al.¹¹ is essential for proving that sexual violence occurred and determining the identity of the perpetrators. Although sexual violence has a high prevalence and incidence and victimizes a vulnerable population that is potentially incapable of defending themselves given their dependency, the under-

reporting of these crimes is possibly among the highest. Even cases that undergo forensic examination are difficult to confirm due to the lack of forensic evidence¹².

In 2012 and 2013, the incidence of sexual violence was 3.67/10,000 when considering all of the age groups included in the study. The findings showed an incidence of 8.16/10,000 in 2012 and 7.99/10,000 in 2013 in the 10-14-year-old age group. Similar results were found in Brazilian studies in Rio de Janeiro and Ceará^{13,14}. Forensic examination reports with confirmation of sexual violence represented approximately 1/3 of the total number of records of children and adolescents suspected of being victims of this type of violence, evidencing that the magnitude of this health problem might be higher than our findings suggested.

Sexual violence is a difficult problem to investigate, and its victims often feel extremely embarrassed to denounce their "personal tragedies" from this type of damaging, humiliating and traumatic experience for the physical and mental health of men and women. In the case of children and adolescents, the investigation process is even more difficult due to their partial or total dependency on their parents/caregivers and their

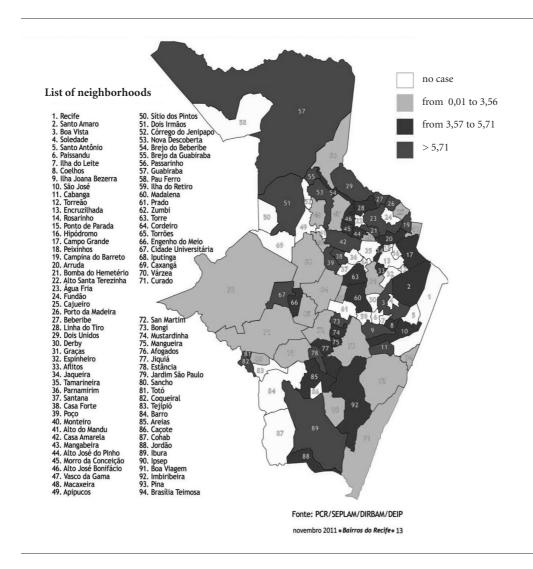


Figure 3. Distribution of the incidence of cases of sexual violence against children and adolescents according to the Recife neighbourhoods from 2012 to 2013.

Source: Primary data from the rape examination reports of IMLAPC-PE2012-2013.

immaturity. This issue is compounded by the fact that sexual crimes are the most difficult to confirm by forensic examination due to the lack of evidence¹², since victims frequently delay the search for forensic medical services. When they do seek out these services, the evidence of sexual violence is lost due to the time elapsed between the occurrence of violence and the report, making confirmation of the crime impossible.

Most victims in this study were female, reinforcing the evidence of female fragility in gender

relationships whether due to the greater physical strength of males, gender inequality or women's vulnerability and risk for victimization, especially in children and adolescents.

Our findings regarding the month of occurrence of sexual violence showed that the school period represented the most frequent months. This finding differed from observations in a study conducted in northeastern Brazil¹⁵ that identified a higher incidence of sexual abuse in January, March and July, with a greater number

Table 1. Distribution of cases of sexual violence against children and adolescents Demographic characteristics and data related to the type of sexual violence. IMLPAC/RECIFE/PE, 2012 to 2013.

	n	%
Demographic characteristics		
Age group (years)		
0 to 4	27	8.2
5 to 9	35	10.7
10 to 14	194	59.2
15 to 18	72	21.9
Sex		
Male	26	7.9
Female	302	92.1
Ethnicity		
White	27	8.2
Mixed race	264	80.5
Black	6	1.8
Not reported	31	9.5
Some type of disability		
Yes	6	1.8
No	311	94.8
Not reported	11	3.4
Type of sexual violence and		
perpetrator		
Rape	249	75.9
Sexual abuse not involving	79	24.1
rape		
Perpetrator		
Father	18	5.5
Stepfather	21	6.4
Sibling	8	2.4
Boyfriend/Girlfriend	63	19.2
Friend	21	6.4
Acquaintance	46	14.0
Stranger	30	9.1
Policeman/Law enforcement	1	0.3
agent		
Cousin	12	3.7
Uncle	18	5.5
Grandfather	5	1.5
Teacher	4	1.2
Neighbour	21	6.4
Not reported	60	18.3
Reclassification of perpetrator		
Family	82	25.0
Acquaintance	155	47.2
Stranger	31	9.5
Not reported	60	18.3
· · · · · · · · · · · · · · · · · · ·		0

Source: Primary data from the rape examination reports. IMLAPC/PE2012-2013.

of reports of sexual violence and a possible association between the high incidence of sexual abuse and school breaks¹⁴.

The distribution of abused children and adolescents was quite heterogeneous when considering their origins in terms of Recife neighbourhoods. Neighbourhoods located in Sanitary Districts II and III (SD II and SD III) had an incidence of 5.71/10.000. Notably, SD III is a heterogeneous area with great social inequalities and vulnerabilities in the type and organization of the resident population. There is low access to sanitation services and high dropout rates, with areas considered to be at a high risk of violence, including more peripheral neighbourhoods in Recife¹⁶. In addition, as in most of the Pernambuco state capital, Recife has numerous pockets of poverty in practically all neighbourhoods of the city that are characterized by extreme socioeconomic inequality.

The prevalence of abused adolescents in this study is indicative of the high rate of violence that affects this age group. Due to their greater autonomy, their movements, social participation and integration into youth groups may increase, which can contribute to greater vulnerability to violence. Furthermore, these findings are similar to those from a study in the northern region of Brazil that found a higher frequency of sexual violence among adolescents17. In addition, at this stage, which is considered a transition between childhood and adulthood¹⁸, individuals are more vulnerable to family violence due to abuse at home, which should be a place where they are safe, and have an effective inability to defend themselves when attacked19.

Few studies have described the existence of people with special needs among victims of sexual violence²⁰. The findings of this study evidenced the presence of disabilities in 1.9% of confirmed cases, which was below the frequencies found by Fonseca et al.⁶, who indicated disability as an important vulnerability factor for violence. The findings of Gomes et al.²¹ regarding the ethnicity of the victims were in agreement with the present study; those authors found a predominance of white and mixed children and adolescents among the victims of sexual violence.

In the present study, rape was positively associated (p<0.001) with an age \geq 10 to 14 years, female victims and the perpetrator being an acquaintance. These findings corroborate a study in Campina Grande/Paraíba in the northeast region of Brazil, which found that 64.4% of cases lacked evidence of violence, 13.7% were statuto-

Table 2. Association of sexual violence with demographic characteristics and type of sexual abuse. Recife, 2012 to 2013.

Characteristics	Type of sexual violence				
	Rape		Sexual abuse not involving rape		
	N	%	n	%	
Age group					
From 0 to 4 years	3	1.2	24	30.4	< 0.001
From 5 to 9 years	7	2.8	28	35.4	
From 10 to 14 years	170	68.3	24	30.4	
From 15 to 18 years	69	27.7	3	3.8	
Sex					
Female	238	95.6	64	81.0	< 0.001
Male	11	4.4	15	19.0	
Ethnicity					
White	19	8.4	8	11.3	0.305
Mixed race	201	88.9	63	88.7	
Black	6	2.7	0	-	
Perpetrator					
Family	41	20.4	41	92.1	< 0.00
Acquaintance	134	66.7	21	31.8	
Stranger	26	12.9	4	6.1	

^{*}Fisher's exact test.

Source: Primary data from rape examination reports. IMLAPC/PE2012-2013.

ry rape, 9.9% had inconclusive results, 7% had libidinous acts, 3.2% had anal rape and 1.6% had vaginal rape as the most common type of sexual violence²². Sexual abuse not involving rape was significantly associated with the age group and adolescents up to 14 years of age, female sex and the perpetrator being a family member in almost all cases.

Regarding the perpetrator, a study by Souza et al.23 indicated that intra- and extrafamilial abuse were performed by different family members or people they trusted who interacted with the victim and his/her family, which made it difficult to investigate and report violence. Similar to our results, Oliveira et al.24 identified the perpetrator as an acquaintance or family member of the victim, including parents, most of whom males. Gender issues are present in the exploitation and domination of males over females, particularly children²⁵, and male sexual freedom is a known product of cultures that legitimize the idea of gender hierarchy26. The dependency of minors on their relatives, especially parents and household members, may contribute to the greater occurrence of this type of violence and its underreporting.

In addition, we must consider the "ignorance" of parents about the abuse of their children and the lack of action when they are made aware of the abuse due to affective and financial dependency and fear of the outcome of notifying and reporting the violence. These reasons compound one another and are determinants of the "obscurity" surrounding sexual violence. This situation creates unfavourable conditions and increases the difficulty of providing necessary assistance to victims and their families for their various pains, including physical and above all affective pains.

The limitations of this study include variables for which the data were ignored or not reported and the inability of retrieving these variables due to the use of secondary data that distance the researcher from the study participants. However, studies of this type are valuable, because they contribute to identification of characteristics of the victims, increase the visibility of this public health problem and allow the identification of research limitations due to the lack of documentary information as well as indicating the need for expansion of public policies aimed at prevention.

The evidence from this study reinforces a number of needs, including the need to broaden

research on this health problem, deepen knowledge of the difficulties faced by the victims and their families when reporting abuse, generate more effective educational policies to promote the need for relevant and comprehensive health care services for victims, develop professional training for early detection of the vulnerability of children and adolescents to the risk of abuse and organize and expand social support networks.

The extent of individual and collective damage to the population resulting from sexual abuse of children and adolescents requires

urgent attention. Childhood is the stage of formation and development of the individual, and while the physical consequences are more likely to be successfully addressed, the psychological consequences generate indescribable pain, because words cannot accurately express the pain endured. Thus, sexual abuse hurts individuality through aggressive invasion of individuality that transcends existence and generates fear, "kills" the "magic" of childhood that is so important and necessary and compromises living in both childhood and beyond this stage.

Collaborations

CA Sena, MA Silva and GH Falbo Neto participated in the design and revisions that resulted in this article.

References

- 1. World Health Organization (WHO). World report on violence and health: summary. Geneva: WHO; 2002.
- Pinheiro PS. Violence against children: a global report. Cien Saude Colet 2006; 11(2):453-460.
- United Nations Children's Fund (UNICEF). A statistical analysis of violence against children. New York: UNICEF: 2014.
- 4. Brasil. Ministério da Saúde (MS). Impacto da violência na saúde das crianças e adolescentes. Brasília: MS; 2010.
- 5. Barbosa LV, Soares ACGM, Cruz KVA, Silva RA. Caracterização da violência sexual em criança no município de Aracaju/SE. Interface (Botucatu) 2013; 1(2):09-20.
- 6. Fonseca MSS, Queiroz LLC, Souza NVS, Queiroz RCCS, Bezerra TSFR. Caracterização das crianças e adolescentes vítimas de Violência sexual atendidos no centro de perícias técnicas para a criança e o adolescente (CPTCA) de São Luís (MA). Rev. Cien. Saúde 2012; 14(2):139-145.
- 7. Guimarães JATL, Villela WV. Características da violência física e sexual contra crianças e adolescentes atendidos no IML de Maceió, Alagoas, Brasil. Cad Saude Publica 2011; 27(8):1647-1653.
- 8. Pernambuco. Secretária de Defesa Social (SDS). Polícia Civil de Pernambuco. Gerência de Polícia da Criança e do Adolescente. Unidade de Apoio Técnico. Crimes praticados contra criança e adolescentes: registro de crimes na Delegacia Especializada e Plantão, 2008: Relatório. Recife: SDS; 2008.
- 9. Brasil. Lei 8069/90 de 13 de julho de 1990. Dispõe sobre o Estatuto da Criança e do adolescente e dá outras providências. Diário Oficial da União 1990; jul 16.
- 10. Silveira PR. Sexologia forense. Revista de Criminologia e Ciências Penitenciárias-PROCRIM. 2012; 2(4).
- 11. Drezett J, Caballero M, Juliano Y, Prieto ET, Marques JA, Fernandes CE. Estudo de mecanismos e fatores relacionados com o abuso sexual em crianças e adolescentes do sexo feminino. Jornal de Pediatria 2001; 77(5):413-419.
- 12. Moradillo HC, Ramos KP, Galvão LCC. A importância do PSA (hk3) na Sexologia Forense. Prova Material 2003; 1(1):22-26.
- 13. Aded NLO, Dalcin BLGS, Cavalcanti MT. Estudo da incidência de abuso sexual contra criancas no Rio de Janeiro, Brasil. Cad Saude Publica 2007; 23(8):1971-1975.
- 14. Vasconcelos AKB, Silva MAA. Caracterização dos atendimentos a criança e adolescentes na perícia forense do Ceará, Núcleo Sobral. SANARE 2011; 10(2):40-49.
- 15. Canuto PQ, Gouveia SMH, Diniz BKL, Araújo LP. Epidemiologia do Abuso Sexual em Crianças e Adolescentes nas Capitais Nordestinas. Revista Semente 2011; 6(6):258-269.
- 16. Recife. Secretária de Saúde (SS). Distrito Sanitário III. Proposta de metodologia para planejamento das microrregionais: pensando o território. Recife: SS; 2009.
- 17. Delfino RK, Faria DS, Miranda MIF, Moraes RMB, Vasconcelos DMP. Violência sexual contra crianças e adolescentes - perfil da vitima e do agressor em Porto Velho/RO. Rev. Soc. Bras. Enferm. Ped. 2009; 9(1):19-25.

- 18. Silva LMP. Violência doméstica contra a criança e o adolescente. Recife: EDUPE; 2002.
- 19. Cardin VSG, Mochi TFG, Bannach R. Abuso Sexual Intrafamiliar: uma violação aos Direitos da Personalidade da Criança e do Adolescente. Revista Jurídica Cesuma-Mestrado 2011; 11(2):401-432.
- 20. Souto RO, Carvalho FK, Araújo D, Cavalcanti AL. Violência Sexual: Análise de dados Relacionados ao Atentado Violento ao Pudor. Rev. Bras. Promoç a Saúde 2012; 25(2):235-242.
- 21. Gomes MLM, Falbo Neto GH, Viana CH, Silva MA. Perfil clínico-epidemiológico de crianças e adolescentes do sexo feminino vítimas de violência atendidas em um Serviço de Apoio à Mulher, Recife, Pernambuco. Rev. Bras. Saúde Mater. Infant. 2006; 6(Supl. 1):S27-S34.
- 22. Trindade LC, Linhares SMGM, Vanrell JP, Godoy D, Martins JCA, Barbas SMAN. Sexual Violence against children and vulnerability. Rev. Assoc. Med. Bras 2014; 60(1):70-74.
- 23. Souza CS, Costa COM, Assis SG, Musse JO, Sobrinho CN, Amaral MTR. Sistema de Vigilância de Violências e Acidentes/VIVA e a notificação da violência infanto-juvenil, no Sistema Único de Saúde/SUS de Feira de Santana-Bahia, Brasil. Cien Saude Colet 2014; 19(3):773-
- 24. Oliveira JR, Costa COM, Amaral MTR, Santos CA, Assis SG, Nascimento OC. Violência sexual e coocorrências em crianças e adolescentes: estudo das incidências ao longo de uma década. Cien Saude Colet 2014; 19(3):759-771.
- 25. Pinto Júnior AA, Lopes DC, Pinheiro VS, Ortiz MM, Oliveira SL. Perfil da violência sexual doméstica contra crianças adolescentes no município de Dourados/MS. Revista Psicologia e Saúde 2012; 4(1):59-68.
- 26. Santana JSS, Santana RP, Lopes ML. Violência sexual contra crianças e adolescentes: análise de notificações dos Conselhos Tutelares e Departamento de Policia Técnica. Revista Baiana de Saúde Pública 2011; 35(Supl. 1):68-86.

Article submitted 17/07/2015 Approved 13/07/2016 Final version submitted 15/07/2017