# Chapter 66

## Temporal trend analysis of violence against the elderly in Brazil





https://doi.org/10.56238/devopinterscie-066

## Marizângela Lissandra de Oliveira Santiago

PhD student in Public Health at the Federal University of Ceará - UFC marizangelalos@gmail.com

#### Renata Adele de Lima Nunes

Master in Collective Health. Medical expert coroner of the forensic expertise of Ceará - Pefoce renataadele@hotmail.com

### Francisco Thiago Carneiro Sena

Master in Public Health from the Federal University of Ceará - UFC thiagosena85@gmail.com

#### Raimunda Hermelinda Maia Macena

Ph.D. in Medical Sciences. Professor of the Graduate Program in Public Health, Federal University of Ceará-UFC lindamacena@gmail.com

#### **ABSTRACT**

Notifications for violence against the elderly have been growing in Brazil since the creation of the Elderly Statute. The purpose of this study is to analyze the temporal trend of violence notifications against the elderly in Brazil. A time series analysis of the main types of violence committed against the elderly in Brazil was performed, using data from SINAN from 2009 to 2019. The results show that the number of notifications of all types of violence against the elderly increased significantly statistics, from 2009 to 2012/2013 for almost all types, and continued to rise until 2019, more discretly, but significantly for physical, psychological, neglect, financial, and repeated violence. Is concluded that the notifications of violence against the elderly have increased significantly, however, it is necessary for society and health professionals to remain alert to identify and report these cases.

**Keywords:** Aged, Violence, Epidemiology.

#### 1 INTRODUCTION

A country's age classification is a relevant component of government dynamics that directly influences the decisions of the various social spheres and the development of socioeconomic policies (WHO, 2015). Thus, given the considerable growth of the Brazilian elderly population in recent years, with an estimated growth of more intense growth since 2020, there is a need for planning and management of public policies appropriate to this new epidemiological profile (MENDES; SÁ; MIRANDA; LYRA et al., 2012).

The elderly population is vulnerable to violence. The coexistence of the elderly with several generations within the same physical environment favors the occurrence of violent situations (AMARAL; MOREIRA; COLEL; ALVES et al., 2018; IGIARAY; ESTEVES; PACHECO; GRASSI-OLIVEIRA et al., 2016; MASCARENHA; ANDRADE; NEVES; PEDROSA et al., 2012), causing aggressors, usually, whether children, nephews, spouses, caregivers or another family member (Aguiar; Leite; Dias; Mattos et al., 2015; Irigaray; Esteves; Pacheco; Grassi-Oliveira et al., 2016). Thus, in addition to the political field, it

is necessary to broaden the look at what happens within Brazilian homes, where most cases of violence against the elderly have a place (Lopes; Ferreira; Pires; Moraes, 2018).

Several factors may be related to the practice of violence against the elderly. The lack of occupation and/or fixed partner of many young people and adults of low education lead to the permanence of this population in the same residence of the elderly, favoring conflicting relationships between generations (Aguiar; Leite; Dias; Mattos et al., 2015), which may be intensified in the face of reducing their autonomy by some disease or physical limitation (Irigaray; Esteves; Pacheco; Grassi-Oliveira et al., 2016). Added to this, the use of alcohol and other drugs by family members, which can trigger not only episodes of physical but also financial violence (AMARAL; MOREIRA; COLE; ALVES et al., 2018; IRIGARAY; ESTEVES; PACHECO; GRASSI-OLIVEIRA et al., 2016; MASCARENHAS; ANDRADE; NEVES; PEDROSA et al., 2012).

Notifications for violence against the elderly have been growing in Brazil since the creation of the Elderly Statute (BRAZIL, 2003) and the action plan to confront violence against the elderly (BRAZIL, 2005). These legal provisions were important social achievements that represented huge legislative advances and contributed to the beginning of debates on violence against the elderly in the country.

With the implementation of the Violence and Accident Surveillance System (Viva), in 2006, and the notification system (Sinan) in 2009, cases of violence were notified in Information systems, and there is gradual adherence of states and municipalities. In addition, the notification of violence began to configure as an institutional obligation of the health sector in 2011, with the inclusion of violence in the compulsory notification list (BRAZIL, 2011).

Many professionals expect the complaint made by the elderly. However, denial is one of the main difficulties in identifying the elderly victim of violence. As there is an affective bond with the aggressor, he insists on defending and justifying his attitudes, thus refusing to denounce those who mistreat him for fear of harming his son, grandson, or caregiver, which could make his life situation Even worse (OLIVEIRA; CARVALHO; OLIVEIRA; SIMPSON et al., 2018).

Health professionals, especially primary care, play an important role in identifying and denouncing violence against the elderly, since facing violence against this population involves adequately meeting the primary needs of this public - food, shelter, safety, and access to Health care (Krug; MERCY; DAHLBERG; ZWI, 2002). However, although professionals can identify some types of violence, especially financial and negligence, or suspect possible cases, many do not want to get involved because they do not know how to proceed or who to turn to, and are afraid of not trusting themselves in the support and protection services of the elderly (Aguiar; Leite; Dias; Mattos et al., 2015; OLIVEIRA; CARVALHO; OLIVEIRA; SIMPONS et al., 2018).

Because of the foregoing, it is evident the importance of analyzing the panorama of notifications of violence in Brazil, especially those committed against vulnerable populations, such as the elderly

population. In this sense, this study aims to analyze the temporal tendency of the notifications of violence against the elderly in Brazil, from 2009 to 2019.

#### 2 METHOD

This is a temporal series study conducted from the analysis of notifications of the main types of violence against the elderly in Brazil. To this end, Sinan Secondary Data were used, obtained from the Ministry of Health website (Datasus), traveling the following search sequence: Health Information (Tabnet) - Epidemiological and Morbidity - Diseases and Notification Diseases (SINAN), 2007 in In front - interpersonal/provoked violence (Brazil by region/UF/municipality) (Brazil, 2022b).

Following, filters corresponding to the age group in question (60 years and over) and year of notification (2009 to 2019), considering the cases reported from January 1, 2009, to December 31, 2019, were selected. Of the data individually, for each type of violence (physical, psychological/moral, neglect/abandonment, financial/economic, sexual, torture, repeat violence, and other types of violence). To obtain gross rates, the annual projections of the resident population of Brazil (2000-2060) were used in Datasus demographic and socioeconomic information (Brazil, 2022a).

Data were tabulated on an Excel spreadsheet for Windows®. Then, the spreadsheet was exported to the Joinpoint Regression Program Software version 4.9.0.1 (NIH, 2022), to calculate the temporal trend, through which lines and regression models of Poisson were obtained (Kim; Fay; Fay; Midthune, 2000). Thus, it was possible to identify the indicator trend by obtaining the annual percentage (APC) and the average annual percentage (AAPC) (SOUZA; LUNA; MAGALHÃES, 2019), whose segments were estimated and tested, with their respective intervals of 95% confidence and P-values of statistical significance tests. The result allowed us to demonstrate whether the trend was growing, stable, or decreasing throughout the historical series analyzed.

Being the study conducted with public domain data, the appreciation by the ethics committee was exempted.

## **3 RESULTS AND DISCUSSION**

The data showed that the number of notifications of all types of violence against the elderly suddenly increased from 2009 to mid-2012/2013, with statistical significance for almost all types, except for other violence, whose increase during this period, was not significant. After 2012/2013, notifications of physical, psychological, negligence, financial, and repetition violence continued to rise significantly by 2019, although more discreetly, while notifications of other violence increased considerably, with statistical significance [APC = 19, 4\* (12.9 - 26.2), p <0.001]. All notifications showed a significant increase in the decade studied (2009-2019), especially those of the other violence, with AAPC = 34.0\* (14.8-56.3) (Table 1).

Table 1-Annual percentage variation and average annual percentage variation (AAPC) of notifications of violence against the elderly in Brazil, by type of violence, period 2009-2019.

VARIABLES	PERIOD		APC	LI	LS	Prob >  t	AAPC 2009-2019	LI	LS
PHYSICAL	2009	2012	64.8*	32.9	104.4	0.001	22.9*	16.5	29.7
	2012	2019	8.4*	5.7	11.2	< 0.001			
PSYCHOLOGICAL/	2009	2013	48.1*	34.5	63.2	< 0.001	20.6*	16.7	24.7
MORAL	2013	2019	5.2*	2.6	7.9	0.003			
NEGLIGENCE/	2009	2013	42.4*	24.9	62.4	0.001	21.0*	15.6	26.6
ABANDONMENT	2013	2019	8.5*	4.8	12.4	0.001			
FINANCIAL/	2009	2013	38.4*	20.6	58.9	0.001	16.8*	11.3	22.5
ECONOMIC	2013	2019	4.2*	0.3	8.3	0.039			
SEXUAL	2009	2012	64.1*	4.8	157.1	0.036	20.1*	7.3	34.4
	2012	2019	5.0	-1.0	11.5	0.090			
TORTURE	2009	2012	64.1*	4.8	157.1	0.036	20.1*	7.3	34.4
	2012	2019	5.0	-1.0	11.5	0.090			
VIOL	2009	2012	64.7*	50.6	80.2	< 0.001	24.5*	21.8	27.3
REPETITION	2012	2019	10.5*	9.3	11.6	< 0.001			
OTHER VIOLENCE	2009	2012	75.4	-6.6	229.1	0.072	34.0*	14.8	56.3
	2012	2019	19.4*	12.9	26.2	< 0.001			

<sup>\*</sup>Significantly different from 0 (p < 0.05).

Source: Joinpoint.

The inclusion of notifications of violence in SINAN in all health services in the national territory, from 2011, with its inclusion in the compulsory notification list, was a crucial factor for the number of notifications to have presented high values between the years 2012 and 2013 (Brazil, 2016). There is also to consider the possible relationship between the increase in notifications of violence against the elderly with the very demographic transition that the country is going through (SOUZA; GOMES; BARBOSA; LIMA, 2020).

The World Health Organization (WHO) describes seven types of violence against the elderly: physical abuse or physical abuse, where there is a use of physical force causing injuries, pain, disabilities, or death; abuse or psychological abuse, which corresponds to verbal or gestural aggression; neglect, in which refusal or omission by the person responsible for the care of the elderly occurs; Self -denial, when denial or failure occurs to provide the proper care to you; abandonment, which consists in the absence of assistance by the responsible; financial abuse, in which the non -consented or illegal exploitation of the elderly resources occurs; and sexual abuse (OLIVEIRA; CARVALHO; OLIVEIRA; SIMPONS et al., 2018).

Physical violence is one of the most frequent typologies in notifications, as it leads to the search for health services by leaving visible brands (Pampolim; Leite, 2020). This fact can be evidenced by the high notification of this type of violence compared to others, as well as torture, which is a more serious form of physical violence. Repetition and sexual violence also obtained increases similar to the previous ones. In particular, in Brazil, repetition violence reaches elderly women and occurs more often in the form of psychological violence or neglect (Mascarenhas; Andrade; Neves; Pedrosa et al., 2012; Pampolim; Leite, 2020).

Studies point to psychological violence as the most practiced against the elderly, occurring in isolation or associated with other types of violence (AGUIAR; DIAS; MATTOS et al., 2015; IRIGARAY; ESTEVES; PACHECO; GRASSI-OLIVEIRA et al., 2016), generating suffering, mainly, in those very poor and those who have some kind of dependence, whether financial, physical or mental, those because they do not have financial conditions to support themselves and because they do not have mastery over their body or mind, being considered, in both cases, as a weight for families and institutions (BRAZIL, 2014). In addition, in old age, the family shows impatience or ignores the elderly, resulting in verbal abuse, characteristic of psychological violence, or abandonment (Amaral; Moreira; Cole; Alves et al., 2018).

Neglect, which refers to the refusal, omission, or insufficiency of appropriate care, such as food and health care by caregivers, family members, and legal or institutional guardians, is one of the most prevalent types of violence in Brazil (Mascarenhas; Andrade; Neves; Pedrosa et al., 2012; Rocha; Côrtes; Dias; Gontijo, 2018) and in the world (YON; MIKTON; SUNSOUMIS; WILBER, 2017). In addition, given the socioeconomic characteristics of the Brazilian population, financial violence is also very present, since the financial interest of the aggressor is among the main causes associated with violence against the elderly (Irigaray; Esteves; Pacheco; Grasi-Oliveira et al., 2016).

In Brazil, the Elderly Statute reaffirmed the rights of the elderly in the health area, ensuring comprehensive health care for the elderly, through SUS (BRAZIL, 2003). However, although all health professionals who offer continuing care for the elderly can subsidize a source of data on abuse signal detection, allowing a qualitative assessment of violence notification (Aguiar; Leite; MATTOS et al., 2015), many of them expect the attitude of some colleague, usually falling responsibility for the social worker or the nurse (OLIVEIRA; CARVALHO; OLIVEIRA; SIMPONS et al., 2018). Therefore, raising routinely aware of these professionals constitutes a necessary action.

Thus, helping the elderly victim of mistreatment to denounce without being abandoned is a challenge. Therefore, multidisciplinary teams are necessary to identify situations of violence and intervene with families (Irigaray; Esteves; Pacheco; Grassi-Oliveira et al., 2016) as well as invest in the consolidation of strategies for mitigation of cases of violence against the elderly, as a reference network and against reference capable of dealing with the subject with resolution (OLIVEIRA; CARVALHO; OLIVEIRA; SIMPSON et al., 2018).

#### **4 FINAL CONSIDERATIONS**

Notifications of cases of violence against the elderly have significantly increased since the inclusion of that interlocutory appeal in the compulsory notification list. Such an increase occurred not only for violence that leaves marks visible and usually requires care for a healthcare professional but also the forms of "invisible violence" or almost imperceptible, such as psychological violence, neglect, and financial violence.

The study presents the limitation of working with secondary data, whose quality of information enables the occurrence of bias given to the high underreport of cases. However, the study did not see to portray an absolute reality in the Brazilian panorama of violence against the elderly, but shows that, despite the notifications, cases of violence are being increasingly notified. However, society and health professionals must remain on a constant warning to identify and denounce the cases of violence against this vulnerable population, from its most subtle form, which usually occurs in the family environment, so that the rights of an elderly person are guaranteed.

#### REFERENCES

- AGUIAR, M. P. C. D.; LEITE, H. A.; DIAS, I. M.; MATTOS, M. C. T. D. et al. Violence against the elderly: case description in the city of Aracaju, Sergipe, Brazil. **Escola Anna Nery Revista de Enfermagem**, v. 19, n. 2, p. 343-349, 2015. DOI:10.5935/1414-8145.20150047
- AMARAL, A. K. D. F. J. D.; MOREIRA, M. A. S. P.; COLER, M. A.; ALVES, M. D. S. C. F. et al. Violência e maus tratos contra a pessoa idosa: representações sociais de jovens, adultos e idosos. **Revista Enfermagem UERJ**, 26, p. e31645, 2018. DOI:10.12957/REUERJ.2018.31645
- BRASIL. **Lei nº 10.741, de 1º de outubro de 2003**. Dispõe sobre o Estatuto do Idoso e dá outras providências sobre a pessoa idosa. Brasília, DF, 2003. Disponível em: http://www.planalto.gov.br/ccivil\_03/leis/2003/110.741.htm. Acesso em: 27 abr 2022.
- BRASIL. **Plano de Ação para o Enfrentamento da Violência Contra a Pessoa Idosa**. Brasília, DF: Subsecretaria de Direitos Humanos da Presidência da República, 2005. 24p. Disponível em: https://www.prattein.com.br/home/images/stories/230813/Envelhecimento/Plano\_Acao\_Enfrent\_Viol\_Id oso.pdf. Acesso em: 15 abr 2022.
- BRASIL. **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 e serviços de saúde. Disponível em: https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt0104\_25\_01\_2011.html. Acesso em: 25 Fev 2022.: Ministério da Saúde. 2011.
- BRASIL. Brasil: manual de enfrentamento à violência contra a pessoa idosa. É possível prevenir. É necessário superar. Brasília, DF: Secretaria de Direitos Humanos da Presidência da República, 2014. 90 p. Disponível em: https://www.gov.br/mdh/pt-br/centrais-de-conteudo/pessoa-idosa/manual-de-enfrentamento-a-violencia-contra-a-pessoa-idosa. Acesso em: 21 abr 2022.
- BRASIL. Viva: Instrutivo para preenchimento da ficha de notificação de violência interpessoal e autoprovocada. Brasília: Ministério da Saúde, 2016. 92 p. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/viva\_instrutivo\_violencia\_interpessoal\_autoprovocada\_2ed.p df. Acesso em: 20 mar 2022.
- BRASIL. **Departamento de Informática do Sistema Único de Saúde** DATASUS. 2022a. Disponível em: http://tabnet.datasus.gov.br/cgi/deftohtm.exe?ibge/cnv/projpopbr.def. Acesso em: 10 Fev.
- BRASIL. **Sistema de Informações de Doenças e Agravos de Notificação** SINAN. 2022b. Disponível em: http://tabnet.datasus.gov.br/cgi/deftohtm.exe?sinannet/cnv/violebr.def. Acesso em: 10 Fev.
- IRIGARAY, T. Q.; ESTEVES, C. S.; PACHECO, J. T. B.; GRASSI-OLIVEIRA, R. et al. Maus-tratos contra idosos em Porto Alegre, Rio Grande do Sul: um estudo documental. **Estudos de Psicologia** (Campinas), v. 33, n. 3, p. 543-551, 2016. DOI:10.1590/1982-02752016000300017
- KIM, H. J.; FAY, M. P.; FEUER, E. J.; MIDTHUNE, D. N. Permutation tests for joinpoint regression with applications to cancer rates. **Stat Med**. 2000 Feb 15;19(3):335-51. doi: 10.1002/(sici)1097-0258(20000215)19:3<335::aid-sim336>3.0.co;2-z. Erratum in: Stat Med 2001 Feb 28;20(4):655. PMID: 10649300. 2000.
- KRUG, E. G.; MERCY, J. A.; DAHLBERG, L. L.; ZWI, A. B. The world report on violence and health. **The Lancet**, v. 360, n. 9339, p. 1083-1088, 2002. DOI:10.1016/S0140-6736(02)11133-0
- LOPES, E. D. D. S.; FERREIRA, Á. G.; PIRES, C. G.; MORAES, M. C. S. D. Elder abuse in Brazil: an integrative review. **Revista Brasileira de Geriatria e Gerontologia**, 21, p. 628-638, 2018. https://doi.org/10.1590/1981-22562018021.180062

- MASCARENHAS, M. D. M.; ANDRADE, S. S. C. D. A.; NEVES, A. C. M. D.; PEDROSA, A. A. G. et al. Violência contra a pessoa idosa: análise das notificações realizadas no setor saúde Brasil, 2010. **Ciência & Saúde Coletiva**, 17, n. 9, p. 2331-2341, 2012. DOI:10.1590/S1413-81232012000900014
- MENDES, A. D. C. G.; SÁ, D. A. D.; MIRANDA, G. M. D.; LYRA, T. M. et al. Assistência pública de saúde no contexto da transição demográfica brasileira: exigências atuais e futuras. **Cadernos de Saúde Pública**, v.28, n. 5, p. 955-964, DOI: 10.1590/S0102-311X2012000500014. Disponível em: https://www.scielosp.org/article/ssm/content/raw/?resource\_ssm\_path=/media/assets/csp/v28n5/14.pdf. Acesso em: 14 abr 2022.
- NIH. Joinpoint Regression Program Version Statistical Methodology and Applications Branch, Surveillance Research Program. https://surveillance.cancer.gov/joinpoint/. National Cancer Institute 2022.
- OLIVEIRA, K. S. M.; CARVALHO, F. P. B. D.; OLIVEIRA, L. C. D.; SIMPSON, C. A. et al. Violência contra idosos: concepções dos profissionais de enfermagem acerca da detecção e prevenção. **Revista Gaúcha de Enfermagem**, v. 39, p. 1-9, 2018. DOI: https://doi.org/10.1590/1983-1447.2018.57462
- OMS. **Relatório Mundial de Envelhecimento e Saúde**. 2015. Disponível em: http://apps.who.int/iris/bitstream/handle/10665/186468/WHO\_FWC\_ALC\_15.01\_por.pdf. Acesso em: 12 abr 2022.
- PAMPOLIM, G.; LEITE, F. M. C. Negligência e violência psicológica contra a pessoa idosa em um estado brasileiro: análise das notificações de 2011 a 2018. **Revista Brasileira de Geriatria e Gerontologia**, v. 23, n. 6, 2020. DOI:10.1590/1981-22562020023.190272
- ROCHA, R. D. C.; CÔRTES, M. D. C. J. W.; DIAS, E. C.; GONTIJO, E. D. Violência velada e revelada contra idosos em Minas Gerais-Brasil: análise de denúncias e notificações. **Saúde em Debate**, 42, p. 81-94, 2018. DOI:10.1590/0103-11042018S406
- SOUZA, C. D. F. D.; LUNA, C. F.; MAGALHÃES, M. D. A. F. M. Transmissão da hanseníase na Bahia, 2001-2015: modelagem a partir de regressão por pontos de inflexão e estatística de varredura espacial\*. **Epidemiologia e Serviços de Saúde**, 28, n. 1, 2019. DOI:10.5123/s1679-49742019000100015
- SOUZA, T. A. D.; GOMES, S. M.; BARBOSA, I. R.; LIMA, K. C. D. Plano de ação para o enfrentamento da violência contra a pessoa idosa no Brasil: análise dos indicadores por Unidades Federativas. **Revista Brasileira de Geriatria e Gerontologia**, v. 23, n. 6, p. 1-14, 2020. Disponível em: https://www.scielo.br/j/rbgg/a/5pLDGPmG5Mf5GWBv5R6Z9fR/?format=pdf&lang=pt. Acesso em: 07 mar 2022.
- YON, Y.; MIKTON, C. R.; GASSOUMIS, Z. D.; WILBER, K. H. Elder abuse prevalence in community settings: a systematic review and meta-analysis. **The Lancet Global Health**, 5, n. 2, p. e147-e156, 2017. DOI: 10.1016/S2214-109X(17)30006-2