# Factors associated with violence against the elderly in the state of Paraná, Brazil

Fatores associados a violência contra a pessoa idosa no estado do Paraná, Brasil Factores asociados a la violencia contra los ancianos en el estado de Paraná, Brasil

#### **RESUMO**

Objetivo: analisar os fatores associados da violência contra a pessoa idosa no Estado do Paraná. Métodos: estudo epidemiológico, transversal, analítico e retrospectivo, sobre as notificações de casos de violência contra a pessoa idosa no estado do Paraná, realizado no período de 2017 a 2019. Os dados foram tabulados em planilha do Excel® e calculadas as medidas de frequência simples e relativas, com auxílio do software Epi-info versão 7.2.3.1. Resultados: idosos de raça branca foram as principais vítimas de violência, sendo as mulheres as mais acometidas. A maior parte das violências ocorreram na residência e foram de natureza física, de repetição e negligencia ou abandono. Conclusão: as mulheres apresentam maior risco de sofrerem violência no domicílio, enquanto os homens, em locais públicos. A análise de violência segundo o sexo poderá contribuir para a realização de estratégias diferenciadas na sociedade, de forma a amenizar esse agravo.

**DESCRITORES:** Violência; Idoso; Epidemiologia.

#### **ABSTRACT**

Objective: to analyze the associated factors of violence against the elderly in the State of Paraná. Methods: epidemiological, cross-sectional, analytical and retrospective study on notifications of cases of violence against the elderly in the state of Paraná, carried out from 2017 to 2019. Data were tabulated in an Excel® spreadsheet and frequency measures were calculated simple and relative, with the help of Epi-info software version 7.2.3.1. Results: Caucasian elderly were the main victims of violence, with women being the most affected. Most of the violence occurred in the residence and was of a physical nature, repeated and neglected or abandoned. Conclusion: women are at greater risk of experiencing violence at home, while men are at public places. The analysis of violence according to sex can contribute to the implementation of different strategies in society, to alleviate this problem.

**DESCRIPTORS:** Violence; Elderly; Epidemiology.

# RESUMEN

Objetivo: analizar los factores asociados a la violencia contra los ancianos en el Estado de Paraná. Métodos: estudio epidemiológico, transversal, analítico y retrospectivo sobre notificaciones de casos de violencia contra ancianos en el estado de Paraná, realizado entre 2017 y 2019. Los datos fueron tabulados en hoja de cálculo Excel® y se calcularon medidas de frecuencia simple y relativa, con la ayuda del software Epi-info versión 7.2.3.1. Resultados: Los ancianos caucásicos fueron las principales víctimas de la violencia, siendo las mujeres las más afectadas. La mayor parte de la violencia ocurrió en la residencia y fue de carácter físico, reiterada y desatendida o abandonada. Conclusión: las mujeres tienen mayor riesgo de experimentar violencia en el hogar, mientras que los hombres lo están en lugares públicos. El análisis de la violencia según el sexo puede contribuir a la implementación de diferentes estrategias en la sociedad, con el fin de paliar este problema.

**DESCRIPTORES:** Violencia; Anciano; Epidemiología.

**RECEBIDO EM:** 10/03/2022 **APROVADO EM:** 12/06/2022

# Vanessa Neckel Derin

Master's student in Nursing. Collaborating Professor at the State University of Paraná – Campus de Paranavaí- nursing department. paranavaí, PR, Brazil.

ORCID: 0000-0002-3851-538X.

#### Guilherme Alda Biscola

Master's student in Nursing by the Graduate Program in Nursing from the State University of Maringá. Maringá, PR, Brazil.

ORCID: 0000-0002-8707-7419.



## Francielle Renata Danielli Martins Marques

Doctoral student in Nursing at the Postgraduate Program in Nursing at the State University of Maringá. Maringá, PR,

ORCID: 0000-0002-8578-9615

#### Aline Balandis Costa

Doctoral student in Nursing at the Postgraduate Program in Nursing at the State University of Maringá. Maringá, PR,

ORCID: 0000-0003-4339-6204

## Maria Aparecida Salci

Doctor in Nursing. Professor of the Postgraduate Program in Nursing at the State University of Maringá. Maringá, PR,

ORCID: 0000-0002-6386-1962

# Lígia Carreira

Post-Doctorate in Nursing. Professor of the Postgraduate Program in Nursing at the State University of Maringá. Maringá, PR, Brazil.

ORCID: 0000-0003-3891-4222

#### INTRODUCTION

llover the world, violence against the elderly represents a serious public health problem, which, despite being underreported, has great consequences for its victims. <sup>1</sup> According to the United Nations (UN), violence against the elderly can be defined as "a single or repeated act, or lack of appropriate action, occurring in any relationship where there is an expectation of trust that causes harm or distress to an older person". 2 It is estimated that in Brazil, every ten minutes an elderly person suffers some type of aggression, causing death on average to 41 of these individuals daily. <sup>3</sup> In 2019 alone, 16,039 cases of violence were reported and in 2020, 25,533. 4

The increase in the life expectancy of the Brazilian elderly population has had repercussions for public social and health policies in challenges to ensure aging with quality and dignity. The National Policy for the Elderly (PNI - Política Nacional do Idoso) and the Elderly Statute were mechanisms created to guarantee a better quality of life for this population and minimize the abuses suffered. 1,3

Abuse against the elderly is a serious

problem that has been hidden from the eyes of society for many years. Because it is a social and public health problem, it deserves more attention from health professionals, mainly from Primary Health Care (PHC) regarding the suspicion of cases of any type of violence against the elderly to notify and protect these victims. 1

Among the types of violence against the elderly, physical violence is the most frequent, followed by psychological and financial violence. 5 Brazil has legislation in force to guarantee the rights of the elderly and which deal with the obligation of compulsory professional notification. 5 Therefore, it is essential that health professionals pay attention to suspicions of any form of violence that may be perpetrated against the elderly and carry out the notification.

The arrival of the COVID-19 pandemic in Brazil intensified the data on this violence, with a 59% growth in cases in the elderly in Brazil. 4 As a consequence of violence, there are damages, which can often be irreversible in its victims, such as early deaths, post-traumatic stress disorder, physical sequelae and suicide attempts. 5

Faced with the cases of violence

in Brazil and the constant increase in the elderly population, it is necessary to carry out measures to promote and prevent health, through the planning of specific public policies, being obtained after the identification of vulnerable groups by this condition in order to propose strategies to increase the safety and dignity of the elderly at greater risk of suffering violence. 5

With the increase in life expectancy and the elderly population, it is urgent to plan specific public policies for this population. 5 Based on the above, the question is: what are the characteristics and associated factors that determine violence against the elderly in the state of Paraná? Thus, this study aimed to analyze the associated factors of violence against the elderly in the State of Paraná.

## **METHOD**

This is an epidemiological, cross--sectional, analytical and retrospective study on notifications of cases of violence against the elderly in the state of Paraná, from 2017 to 2019. The state of Paraná is located in the southern region of Brazil and occupies a geographic area of 199.298,982 km<sup>2</sup>. The



last IBGE Census, carried out in 2010, indicates that the State has 1,316,554 inhabitants over 60 years of age. <sup>6</sup>

Data collection was carried out from September to November 2021, obtained by consulting the individual notification/investigation forms of domestic, sexual and/or other violence present in SINAN (Information System for Notifiable Diseases), provided by the Department of Informatics of the Unified Health System (DATASUS).

All forms of notification of violence perpetrated against people aged 60 years or older were included, this being the dependent variable. The independent variables were: regional health, gender (female or male), race (white and non-white), education (≤8 years of schooling or >8 years of schooling), place of occurrence (home or public place), nature of violence (physical, sexual, psychological, neglect, self-harm, repetition, torture or financial), marital status (married or stable union; divorced or separated; single; widowed; others), type of involvement (perpetrator, victim), relationship between victim/perpetrator (with degree of kinship, without degree of kinship), degree of injury (no injury, mild, serious or fatal injury), presumed cause (family friction and friction, drugs, fights and others). The number of inhabitants per region was obtained from data derived from the 2010 census and intercensus estimates, made available by the Brazilian Institute of Geography and Statistics (IBGE).

For analysis, data were tabulated in an Excel® spreadsheet and simple and relative frequency measures were calculated, association measures were estimated using the Odds Ratio and, later, statistical tests were performed using Pearson's Chi-square and Fisher's exact test when the frequencies were less than 6 units. For all analyses, a confidence interval of 95% and a significance level of 5% were considered,

Among the types of violence against the elderly, physical violence is the most frequent, followed by psychological and financial violence.

performed with the aid of the Epi-info software version 7.2.3.1.

The research did not require approval from the Research Ethics Committee of the University, as it is a public domain database, according to Resolution 466/12 of the National Health Council.

## **RESULTS**

We analyzed 6089 reports of violence in the elderly, in the State of Paraná/Brazil, from 2017 to 2019. Among the 22 health regions (RS) in the State, the 2nd RS (39.60%) was the most prevalent, followed by the 17th (16.42%) and 15th (6.75%).

Regarding gender, elderly women were at greater risk of suffering violence in the 5th SR (OR= 1.96 CI= 1.43-2.67 p= 0.0000), followed by the 17th SR (OR= 1.22 CI= 1.06-1.40 p= 0.0047) and the 2nd (OR= 1.21 CI=1.09-1.34 p=0.0003). And the lowest risk of violence for elderly women occurred in the 18th SR (OR= 0.33 CI= 0.16-0.66 p= 0.0017), followed by the 22nd RS (OR= 0.45 CI= 0.25-0.79 p=0.0066) and the 1st RS (OR= 0.57 CI= 0.42-0.76 p= 0.0002) (Table 1).

Regarding the sociodemographic variables, the white elderly were the main victims of violence (73.2%), with women being the most affected (42.86%). Most victims had eight or less years of schooling (44.5%); of these, low schooling was higher among female victims (25.60%). Regarding the place of occurrence, most of the violence occurred in the residence (82.23%), women were at greater risk of being assaulted at home (p<0.05), while men were at greater risk of being assaulted in public places (p<0.05) (Table 2).

The types of violence with the highest occurrences were: physical violence (51.90%), repeated violence (49.95%) and neglect/abandonment (32.93%). Among the female victims, repeated violence (32.60%), physical



violence (27.51%) and psychological violence (21.3%) predominated. Men were more attacked by physical violence (24.39%), repeated violence (16.8%) and neglect/abandonment (13.43%).

The analysis by sex showed that the elderly women had a 7.5 greater risk of suffering sexual violence, <sup>2.3</sup> greater risk of suffering psychological violence, 2 times greater probability of repeated violence and 43% greater risk of financial/economic violence (p=<0.05). However, men were 35% more likely to suffer injuries from physical violence, violence from torture (28%) and self-harm (21%) (p=<0.05) (Table 3).

Related to the means of aggression, there was a greater presence of this aggression in victims by physical force (38.7%), then by threat (18.7%) and by another aggression (18.3%). Regarding the sex of the victims, women suffered more violence by physical force (22.12%), followed by threats (13.78%) and other aggression (10.56%). While men suffered predominantly also in the first place by physical force (16.62%), but followed by another aggression (7.82%) and by threat (4.99%).

When analyzing the Odds Ratio,

it can be observed that women are 2.3 times more likely to be threatened and 1.34 times more likely to be poisoned (p=<0.05). However, men had an 84% higher risk of violence by firearms (OR= 0.16), and a 58% greater chance of being victims of blunt and sharp objects (OR= 0.42) (p=<0.05). Regarding the aggressor, only 27% of the cases were suspected of using alcohol. Mostly used by female aggressors (15.90%).

Among the main aggressors, the child was in first place 39.42%, followed by other bonds 16.46% and in third pla-

Tabela 1 – Notificação de violência contra idosos por regionais de saúde do Estado do Paraná, segundo o sexo, de 2017 a 2019. Maringá, PR, Brasil, 2022

Madablas	Female		Male		Total		0.0	- CI	_
Variables	N	%	N	%	N	%	OR	CI	р
Health Regional									
1st RS Paranaguá	79	1,30	99	1,63	178	2,92	0,57	(0,42-0,76)	0,0002
2nd RS Metropolitana	1.465	24,06	946	15,54	2.411	39,60	1,21	(1,09-1,34)	0,0003
3rd RS Ponta Grossa	112	1,84	54	0,89	166	2,73	1,52	(1,09-2,11)	0,0144
4th RS Irati	44	0,72	39	0,64	83	1,36	0,81	(0,52-1,26)	0,4232
5th RS Guarapuava	148	2,43	56	0,92	204	3,35	1,96	(1,43-2,67)	0,0000
6th RS União da Vitória	36	0,59	35	0,57	71	1,17	0,74	(0,46-1,18)	0,2632
7th RS Pato Branco	141	2,32	96	1,58	237	3,89	1,06	(0,82-1,39)	0,6656
8th RS Francisco Beltrão	96	1,58	79	1,30	175	2,87	0,87	(0,65-1,18)	0,4495
9th RS Foz do Iguaçu	82	1,35	81	1,33	163	2,68	0,72	(0,53-0,99)	0,0553
10th RS Cascavel	124	2,04	108	1,77	232	3,81	0,82	(0,63-1,07)	0,1801
11th RS Campo Mourão	58	0,95	71	1,17	129	2,12	0,58	(0,41-0,83)	0,0034
12th RS Umuarama	20	0,33	25	0,41	45	0,74	0,57	(0,32-1,04)	0,0916
13th RS Cianorte	12	0,20	4	0,07	16	0,26	2,18	(0,70-6,77)	0,2088*
14th RS Paranavaí	32	0,53	32	0,53	64	1,05	0,72	(0,44-1,18)	0,2445
15th RS Maringá	200	3,28	211	3,47	411	6,75	0,66	(0,54-0,81)	0,0001
16th RS Apucarana	67	1,10	56	0,92	123	2,02	0,86	(0,60-1,24)	0,4893
17th RS Londrina	620	10,18	380	6,24	1.000	16,42	1,22	(1,06-1,40)	0,0047
18th RS Cornélio Procópio	12	0,20	26	0,43	38	0,62	0,33	(0,16-0,66)	0,0017
19th RS Jacarezinho	16	0,26	24	0,39	40	0,66	0,48	(0,25-0,90)	0,3209
20th RS Toledo	77	1,26	58	0,95	135	2,22	0,96	(0,68-1,36)	0,9021
21st RS Telêmaco Borba	66	1,08	50	0,82	116	1,91	0,95	(0,66-1,38)	0,8954
22nd RS Ivaiporã	20	0,33	32	0,53	52	0,85	0,45	(0,25-0,79)	0,0066
Source: Survey data, 2022. *Fisher's exact test.									



Table 2 - Sociodemographic data of elderly victims of violence in the State of Paraná, from 2017 to 2019. Maringá, PR, Brazil, 2022 Male **Female** Total **Variables** OR CI p Ν % Ν % N % Ethnicity White 4.457 0,0780 2.610 42,86 1.847 30,33 73,20 1,12 (0,98-1,27)Not white 9,03 20,40 1 692 11,36 550 1.242 Not informed 225 3,70 2,71 390 6,40 165 Education <8 years of study 1559 25,60 1153 18,94 2.712 44,54 1,05 (0,91-1,22)0,4936 > 8 years of study 9,07 431 7,08 983 1 552 16,14 Does not apply 4 0,07 6 0,10 10 0,16 Not informed 1.412 23,19 972 15,96 2.384 39,15 Place of occurrence Home 3.153 51,78 1.854 30,45 5.007 82,23 3,30 (2,86-3,82)0,0000 Collective Housing 45 0.74 67 1,10 112 1,84 0.47 (0,32-0,69)0.0001 School 5 0,08 6 0,10 11 0,18 0,59 (0,18-1,95)0,5425\* Sports practice place 0,00 3 0,05 3 0,05 Bar or Similar 0,99 20 0,33 60 80 1,31 0,23 (0,14-0,39)0,0000 Public way 2,32 350 141 5,75 491 8,06 0,25 (0,21-0,31)0,0000 Commerce / Services 56 0,92 70 1,15 126 2,07 0,56 (0,39-0,80)0,0020 Industries/construction 0,00 2 0,03 2 0,03 Others 64 1,05 86 1,41 150 2,46 0,52 (0,37-0,72)0,0001 Not informed 0,71 1,76 43 64 1,05 107 Source: Research data, 2022.

Table 3 - Types of violence suffered by elderly victims in the State of Paraná, between 2017 and 2019. Maringá, PR, Brazil, 2022.											
Variables	Female		N	Male		Total		CI	n		
	N	%	N	%	N	%	OR	Ci	р		
Violence repetition											
Yes	1.985	32,60	1.026	16,85	3.011	49,45	2,03	(1,81-2,27)	0,0000		
No	1.067	17,52	1.121	18,41	2.188	35,93	1				
Not informed	475	7,80	415	6,81	890	14,62					
Self-harm											
Yes	432	7,09	379	6,22	811	13,32	0,79	(0,68-0,92)	0,0031		
No	2.980	48,94	2.083	34,21	5.063	83,15	1				
Not informed	115	1,89	100	1,64	215	3,53					
Physical Violence											
Yes	1.675	27,51	1.485	24,39	3.160	51,90	0,65	(0,59-0,72)	0,0000		
No	1.836	30,15	1.070	17,57	2.906	47,73	1				



Not informed	16	0,26	7	0,11	23	0,38			
Psycho/moral violence Yes	1.299	21,33	519	8,52	1.818	29,86	2,30	(2,04-2,58)	0,0000
						,	·	(2,04-2,36)	0,0000
No	2.216	36,39	2.037	33,45	4.253	69,85	1		
Not informed	12	0,20	5	0,10	18	0,30			
Torture Violence									
Yes	68	1,12	68	1,12	136	2,23	0,72	(0,51-1,01)	0,0724
No	3.440	56,50	2.484	40,79	5.924	97,29	1		
Not informed	19	0,32	10	0,16	29	0,48			
Sexual Violence									
Yes	100	1,64	10	0,16	110	1,81	7,51	(3,91-14,41)	0,0000
No	3.410	56,00	2.541	41,73	5.951	97,73	1		
Not informed	17	0,28	11	0,18	28	0,46			
Finan/Econ violence									
Yes	421	6,91	222	3,65	643	10,56	1,43	(1,20-1,69)	0,0000
No	3.090	50,75	2.330	38,27	5.420	89,01	1		
Not informed	16	0,27	10	0,16	26	0,43			
Neglect / Aband violence									
Yes	1.187	19,49	818	13,43	2.005	32,93	1,08	(0,96-1,20)	0,1705
No	2.330	38,27	1.735	28,49	4.065	66,76	1		
Not informed	10	0,16	9	0,14	19	0,31			
Source: Survey data, 2022. *Caption: Fin	an/econ: Financia	l and/or economic	; Aband: Abandor	nment; Psycho: P	sychological.				

ce caused by themselves (13.76%). In comparison to the sexes, women were attacked mainly by the child (25.16%), followed by other bonds (10.36%) and in third place by the spouse (7.88%). Men were also attacked mainly by their children (14.26%), followed by strangers (6.72%) and by themselves as aggressors (6.55%) (Tables 4 and 5).

When analyzing the Odds Ratio, it can be observed that women were 4 times more likely to be assaulted by their mother, 2.7 times for the spouse, 2 times for the ex-spouse, 10 times for the ex-boyfriend, 47% higher risk for the child, and 27% greater chance for other bonds compared to males (p=<0.05). While men had a 55% higher risk of being assaulted by friends/acquaintances, 70% greater chance by stranger (a), 44% greater by people with instant relationship, and 24% by the person themselves, compared to fe-

male victims (p = < 0.05).

Regarding the outcome of the case, both the referral from the health sector and the evolution of the case, the notifications were all blank, making any data analysis impossible.

## **DISCUSSION**

From the data presented, it was possible to observe a cruel and sadistic reality witnessed in Brazil, the predominance of violence against elderly women, with similar results being observed in a study carried out in Manaus - AM and another in the Federal District. 8.9 This fact being explained due to a historical and cultural process, fruits of machismo and patriarchy, in which years ago men had the right to attack women, guaranteed by the state by laws. 10 Another factor that impacts older women in higher rates of violen-

ce is related to these victims having greater comorbidities and limitations, compared to males, making them more vulnerable to this type of problem. 8

Regarding the greater presence of victims being of white race/color, similar results were obtained in studies from Campinas - SP <sup>11</sup> and São Paulo - SP. <sup>12</sup> However, opposite results were obtained in a survey in Manaus - AM 8 in which 71% of the victims were brown and according to a survey carried out by the Institute of Applied Economic Research - IPEA, in 2019, 66% of the murdered women were black. <sup>13</sup>

Regarding the education of the victims, in which there was a predominance of victims with less education, according to a study carried out in India, education is the greatest protective factor of the elderly against violence, above even other variables such as the

Table 4 - Data on the aggressor in cases of violence in victims aged 60 years or older with affective relationships, in the state of Paraná - Brazil, in its 22 health regions, from 2017 to 2019.

state of Paraná - Brazil, in its 22 health regions, from 2017 to 2019.											
Variables	Fe	emale	r	Vlale	1	Total	OR	CI	n		
	N	%	N	%	N	%	UK	Ci	р		
Suspected alcohol use											
Yes	968	15,90	683	11,22	1.651	27,11	0,94	(0,84-1,07)	0,4248		
No	1.825	29,97	1.223	20,09	3.048	50,06	1				
Not informed	734	12,05	656	10,78	1.390	22,83					
Father											
Yes	10	0,16	15	0,25	25	0,41	0,47	(0,21-1,06)	0,1015		
No	3.475	57,07	2.496	40,99	5.971	98,06	1				
Not informed	42	0,69	51	0,84	93	1,53					
Mother											
Yes	17	0,28	3	0,05	20	0,33	4,09	(1,20-14,00)	0,0206*		
No	3.467	56,94	2.508	41,19	5.975	98,13	1				
Not informed	43	0,71	51	0,84	94	1,54					
Stepfather											
Yes	3	0,05	-	0,00	3	0,05					
No	3.481	57,17	2.511	41,24	5.992	98,41			-		
Not informed	43	0,71	51	0,84	94	1,54					
Stepmother											
Yes	4	0,07	-	0,00	4	0,07			-		
No	3.480	57,15	2.512	41,25	5.992	98,41					
Not informed	43	0,71	50	0,82	93	1,53					
Spouse											
Yes	480	7,88	140	2,30	620	10,18	2,7	(2,22-3,28)	0,0000		
No	3.001	49,29	2.366	38,86	5.367	88,14	1				
Not informed	46	0,76	56	0,92	102	1,68					
Ex-Cônjuge											
Yes	70	1,15	25	0,41	95	1,56	2,03	(1,28-3,22)	0,0028		
No	3.413	56,05	2.480	40,73	5.893	96,78	1				
Not informed	44	0,72	57	0,93	101	1,64					
Boyfriend/Girlfriend											
Yes	18	0,30	5	0,08	23	0,38	2,59	(0,96-7,00)	0,05705*		
No	3.466	56,92	2.502	41,09	5.968	98,01	1				
Not informed	43	0,71	55	0,90	98	1,61					
Ex-Boyfriend/Ex-Girl- friend											
Yes	14	0,23	1	0,02	15	0,25	10,11	(1,32-76,94)	0,0064*		
No	3.470	56,99	2.506	41,16	5.976	98,14	1				
Not informed	43	0,56	47	0,90	98	1,61					
Son/Daughter											



Yes	1.532	25,16	868	14,26	2.400	39,42	1,47	(1,32-1,64)	0,0000
No	1.943	31,91	1.628	26,74	3.571	58,65	1		
Not informed	52	0,86	66	1,08	118	1,94			
Siblings									
Yes	111	1,82	96	1,58	207	3,40	0,82	(0,62-1,08)	0,1987
No	3.369	55,33	2.404	39,48	5.773	94,81	1		
Not informed	47	0,77	62	1,02	109	1,79			
Friends / Acquaintances									
Yes	176	2,89	260	4,27	436	7,16	0,45	(0,37-0,56)	0,0000
No	3.304	54,26	2.241	36,80	5.545	91,07	1		
Not informed	47	0,67	61	1,11	108	1,78			
Caretaker									
Yes	87	1,43	68	1,12	155	2,55	0,91	(0,66-1,26)	0,6519
No	3.396	55,77	2.432	39,94	5.828	95,71	1		
Friends / Acquaintances	44	0,72	62	1,02	196	1,74			
Themselves									
Yes	439	7,21	399	6,55	838	13,76	0,76	(0,65-0,88)	0,0003
No	3.049	50,07	2.114	34,72	5.163	84,79	1		
Not informed	39	0,74	49	0,80	88	1,44			
Other Links									
Yes	631	10,36	371	6,09	1.002	16,46	1,27	(1,10-1,46)	0,0007
No	2.846	46,74	2.132	35,01	4.978	81,75	1		
Not informed	50	0,82	59	0,97	109	1,79			
Source: Research data, 2022.									

Table 5 - Data on the aggressor in cases of violence in victims aged 60 years or older without any affective relationship, in the state of Paraná - Brazil, in its 22 health regions, in the year 2017 to 2019..

Variables	Female		Male		Total		OR	CI	n
variables	N	%	N	%	N	%	OK	Ci	р
Unknown									
Yes	194	3,19	409	6,72	603	9,90	0,3	(0,25-0,36)	0,0000
No	3.288	54,00	2.096	34,42	5.384	88,42	1		
Not informed	45	0,74	57	0,93	102	1,67			
Boss									
Yes	3	0,05	2	0,03	5	0,08	1,08	(0,18-6,47)	1,0000*
No	3.481	57,17	2.507	41,17	5.988	98,34	1		
Not informed	44	0,71	53	0,87	96	1,58			
People with Instant Relationshi	ip								
Yes	44	0,72	56	0,92	100	1,64	0,56	(0,37-0,83)	0,0053
No	3.439	56,48	2.452	40,27	5.891	96,75	1		
Not informed	44	0,72	54	0,89	98	1,61			

Police / Law Enforcement									
Yes	3	0,05	4	0,07	7	0,11	0,53	(0,12-2,41)	0,4619*
No	3.482	57,19	2.505	41,14	5.987	98,32	1		
Not informed	42	0,69	53	0,87	95	1,56			
Source: Research data, 2022.									

economic level of the victims, suggesting that a higher level of education after elementary school is capable of preventing violence against the elderly. 14

Related to the occurrence of violence place, which occurred predominantly in both sexes in their homes, one of the causes of this event is due to the omission of the state, that in our society neglects the protection of the elderly, even though it is a constitutional duty. 15 Another reason that also leads to aggression against these victims at home is due to economic reasons, in which the aggressors exploit and appropriate the victim's financial assets, generating in many cases other types of violence. 16 As for the greater risk of violence against elderly women in their homes, this fact is caused by the social construction of the role of women in society, linked to a greater devaluation and subordination even in their own homes. 17

As for the type of violence, similar results were obtained regarding the greater exposure of elderly males to physical violence, in a study carried out in a Hospital in the Central Plateau and in a study in Almenara - MG in which they showed that while men suffer higher rates of physical aggression,

women suffer other types of violence such as psychological and neglect. 18-19

Another type of violence evidenced, which was more likely to be suffered by women is sexual, aggression in which it is difficult for victims to face for various causes such as shame, the low support of the victims by the families, and the lack of effective public measures to carry out this type of complaint.

#### CONCLUSION

The study analyzed the factors associated with violence against the elderly, according to sex, in the state of Paraná-Brazil in the period between 2017 and 2019 and found that women were more likely to be raped in their homes compared to men. Elderly victims were at greater risk of repeating sexual, psychological and financial violence; while the elderly were at greater risk of suffering physical violence, torture and self-harm.

The main aggressors of female victims were people known as mother, spouse, ex-spouse, ex-boyfriend and son. On the other hand, elderly men were more likely to be attacked in collective housing, bars or similar, on public ways and in shops, by a group of aggressors who were friends, strangers, people with an instant relationship and the victim himself.

It is hoped that this study will provide important information on the different forms of aggression by sex and that it will enable the planning of interventions aimed at preventing violence against the elderly and protecting this population, preventing the growth of the number of victims and serious consequences for society.

In the study, the main limitation was the underreporting of cases, which may contribute to these results deviating from the real dimension of the accidents that occurred, showing only a vestige of the serious problem present in our population.

# **COLLABORATORS**

All authors contributed significantly to the writing of the article or relevant critical review of the intellectual content; conception and design or analysis and interpretation of data and final approval of the version to be published.

# REFERENCES

- 1. Brasil. Ministério da Saúde. 15/6 Dia Mundial de Conscientização da Violência Contra a Pessoa Idosa. Brasília: Ministério da Saúde, 2021[cited 2022 Feb 04]. Available from: https://bvsms. saude.gov.br/15-6-dia-mundial-de-conscientizacao-da-violencia-contra-a-pessoa-idosa-2/.
- 2. United Nations. Department of Economic and Social Affairs. Ageing: World Elder Abuse Awareness Day. Nova Iorque: United

Nations, 2021[cited 2022 Feb 03]. Available from: https://www. un.org/development/desa/ageing/world-elder-abuse-awareness-

3. Brasil. Câmara dos Deputados. Violência contra o Idoso. Brasília: Programas da TV Câmara: Participação Popular, 2022[cited 2020 Feb 02]. Available from: https://www.camara.leg.br/tv/524124-violencia-contra-o-idoso/.

- 4. Universidade Federal de Alagoas. Notícias. Dados confirmam que violência contra idosos cresceu na pandemia. Alagoas: Assessoria de Comunicação, 2021[cited 2020 Jan 02]. Available from: https://ufal.br/ufal/noticias/2021/6/dados-confirmam-que-vio-lencia-contra-idosos-cresceu-com-a-pandemia.
- 5. Hohendorff JV, Paz AP, Freitas CPP, Lawrenz P, Habigzang LF. Caracterização da violência contra idosos a partir de casos notificados por profissionais da saúde. Revista da SPAGESP. 2018;19(2):64-80. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci\_arttext&pid=S1677-29702018000200006.
- 6. Instituto Brasileiro de Geografia e Estatística. Sinopse do Censo Demográfico 2010 Paraná. Brasília: IBGE, 2010[cited 2022 Jan 08]. Available from: https://censo2010.ibge.gov.br/sinopse/index.php?dados=0&uf=41.
- 7. Brasil. Departamento de Informática do Sistema Único de Saúde. Tabnet. Brasília: DATASUS, 2022[cited 2021 Dez 01]. Available from: https://datasus.saude.gov.br/informacoes-de-saude-tabnet/.
- 8. Pedroso AL, Duarte Júnior SR, Oliveira NF. Perfil da pessoa idosa vítima de violência intrafamiliar de um centro integrado de proteção e defesa de direitos em tempos de pandemia. Revista Brasileira de Geriatria e Gerontologia. 2021;24(6):e210108. DOI: https://doi.org/10.1590/1981-22562020024.210108. Available from: https://www.scielo.br/j/rbgg/a/w9PYjJTLZdRqvH9YCrX6Cqm/.
- 9. Matos NM, Albernaz EO, Sousa BB, Braz MC, Vale MS, Pinheiro HA. Perfil do agressor de pessoas idosas atendidas em um centro de referência em geriatria e gerontologia do Distrito Federal, Brasil. Revista Brasileira de Geriatria e Gerontologia. 2019;22(5):e190095. DOI: https://doi.org/10.1590/1981-22562019022.190095. Available from: https://www.scielo.br/j/rbgg/a/xZYqVNmDV4SB-7v44FZkgbfq/abstract/?lang=pt.
- 10. Soares MLM, Guimarães NGM, Bonfada D. Tendência, espacialização e circunstâncias associadas às violências contra populações vulneráveis no Brasil, entre 2009 e 2017. Ciência & Saúde Coletiva. 2021;26(11):5751-5763. DOI: https://doi.org/10.1590/1413-812320212611.25242020. Available from: https://www.scielo.br/j/csc/a/wVJNy5CVYJYNxfmzYhmjxfg/?lang=pt.
- 11. Lopes EDS, D'Elboux MJ. Violência contra a pessoa idosa no município de Campinas, São Paulo, nos últimos 11 anos: uma análise temporal. Revista Brasileira de Geriatria e Gerontologia. 2021;24(6):e200320. DOI: https://doi.org/10.1590/1981-22562020023.200320. Available from: https://www.scielo.br/j/rbgg/a/9cffkm8dTNQB5RvdBCsdKcj/.
- 12. Machado DR, Kimura M, Duarte YAO, Lebrão ML. Violência contra idosos e qualidade de vida relacionada à saúde: estudo populacional no município de São Paulo, Brasil. Ciência & Saúde Coletiva. 2020;25(3):1119-1128. DOI: https://doi.org/10.1590/1413-81232020253.19232018. Available from: https://www.scielo.br/j/csc/a/cBqSSWBMrF9bnNv3Dhx-8d7g/?lang=pt.
- 13. Cerqueira D. Atlas da Violência 2021. São Paulo: FBSP, 2021. DOI: https://doi.org/10.38116/riatlasdaviolencia2021. Available from: https://www.ipea.gov.br/atlasviolencia/arquivos/artigos/1375-atlasdaviolencia2021completo.pdf.

- 14. Skirbekk V, James KS. Abuse against elderly in India The role of education. BMC Public Heath. 2014;14(336):1-8. DOI: https://doi.org/10.1186/1471-2458-14-336. Available from: https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-336.
- 15. Rocha RC, Cortês MCJW, Dias EC, Gontijo ED. Violência velada e revelada contra idosos em Minas Gerais-Brasil: análise de denúncias e notificações. Saúde em debate. 2018;42(4):81-94. DOI: https://doi.org/10.1590/0103-11042018S406. Available from: https://www.scielo.br/j/sdeb/a/dfpcfFBff5wb8vPdFpTTLQd.
- 16. Machado JC, Rodrigues VP, Vilela ABA, Simões AV, Morais RLGL, Rocha EM. Intrafamily violence and actions strategies of the Family Health team. Saúde e Sociedade. 2014;23(3):828-840. DOI: https://doi.org/10.1590/S0104-12902014000300008. Available from: https://www.scielo.br/j/sausoc/a/QJspb6DwvFvzK5KdTy5k43k/abstract/?lang=en.
- 17. Cunha RIM, Oliveira LVA, Lima KC, Mendes TCO. Perfil epidemiológico das denúncias de violência contra a pessoa idosa no Rio Grande do Norte, Brasil (2018-2019). Revista Brasileira de Geriatria e Gerontologia. 2021;24(6):e210054. DOI: https://doi.org/10.1590/1981-22562020024.210054. Available from: https://www.scielo.br/j/rbgg/a/hCfLdqm9VRJ9Xwkyy3dddns/.
- 18. Soares MC, Barbosa AM. Perfil de idosos vítimas de violência atendidos em um hospital de urgências. Revista Científica da Escola Estadual de Saúde Pública de Goiás "Candido Santiago". 2020;6(1):18-34. Available from: https://www.revista.esap.go.gov.br/index.php/resap/article/view/190.
- 19. Paiva MM, Niitsuma ENA, Nascimento JS, Prates DP. Perfil epidemiológico dos casos de violência entre idosos no interior do Norte de Minas Gerais, Brasil. Revista Família, Ciclos da Vida e Saúde no Contexto Social. 2019;7(4):431-440. DOI: https://doi.org/10.18554/refacs.v7i4.3708. Available from: https://seer.uftm.edu.br/revistaeletronica/index.php/refacs/article/view/3708.
- 20. Gomes JMA, Nascimento V, Ribeiro MNS, Espírito Santo FH, Diniz CX, Souza CRS et al. Abuso sexual sofrido por mulheres idosas: relatos de vivências. Revista Kairós-Gerontologia. 2020;23(1):323-339. DOI: http://dx.doi.org/10.23925/2176-901X.2020v23i1p323-339. Available from: https://revistas.pucsp.br/index.php/kairos/article/view/50572.
- 21. Débora Lorena Melo Pereira, Iderlania Maria de Oliveira Sousa, Rita da Graça Carvalhal Frazão Correa, Poliana Pereira Costa Rabelo, Isaura Letícia Tavares Palmeira Rolim, Bruno Luciano Carneiro Alves de Oliveira. Processo histórico de mudanças na saúde pública até a implantação da política nacional de atenção básica. SaudColetiv (Barueri) [Internet]. 22º de março de 2022 [citado 11º de abril de 2022]; 12(74):9811-24. Disponível em: http://revistas.mpmcomunicacao.com.br/index.php/saudecoletiva/article/view/2342
- 22. Oliveira, Kênnia Stephanie Morais et al. Violência contra idosos: concepções dos profissionais de enfermagem acerca da detecção e prevenção. Revista Gaúcha de Enfermagem [online]. 2018, v. 39 [Acessado 15 Maio 2022], e57462. Disponível em: <a href="https://doi.org/10.1590/1983-1447.2018.57462">https://doi.org/10.1590/1983-1447.2018.57462</a>. Epub 23 Jul 2018. ISSN 1983-1447. https://doi.org/10.1590/1983-1447.2018.57462.