https://doi.org/10.1590/1980-549720210019.supl.2

**ORIGINAL ARTICLE /** ARTIGO ORIGINAL

# Prevalence of exposure to violence among adults – Brazil, 2019

Prevalência de exposição à violência entre adultos – Brasil, 2019

Márcio Dênis Medeiros Mascarenhas<sup>I,II</sup>, Ariel de Sousa Melo<sup>I</sup>, Malvina Thais Pacheco Rodrigues<sup>I,II</sup>, Camila Alves Bahia<sup>III</sup>, Cheila Marina Lima<sup>III</sup>, Rafael Bello Corassa<sup>III</sup>, Fabiana Martins Dias de Andrade<sup>IV</sup>, Deborah Carvalho Malta<sup>IV</sup>

ABSTRACT: Objective: To estimate the prevalence of exposure to violence, characterizing its magnitude, types and occurrence in the adult population in Brazil. Methods: Cross-sectional study with data from the National Health Survey conducted in 2019. The prevalence of violence in the last 12 months and respective 95% confidence intervals (95%CI) were estimated according to sociodemographic variables. Crude prevalence ratios were estimated by Poisson regression. Results: The prevalence of exposure to violence among adults in Brazil was 18.3% (95%CI 17.8-18.8), with a significantly higher frequency among women (19.4%; 95%CI 18.7-20.0), in the 18-29 age group (27.0%; 95%CI 25.7-28.4), in self-declared black people (20.6%; 95%CI 19.3-21.9) and mixed race (19.3%; 95%CI 18.6-20.1) and among inhabitants of the Northeast region (18.7%; 95%CI 18.0-19.5). Among the victims of violence, 15.6% (95%CI 14.2-17.0) sought health care, of which (91.2%; 95%CI 88.1–93.6) were attended. The most reported types of violence were: psychological (17.4%; 95%CI 16.9-17.9), physical (4.1%; 95%CI 3.9-4.4) and sexual (0.8%; 95%CI 0.7-0.9). Men were more exposed to violence with the use of firearms or sharp targets, while women were the predominant victims for all other types and mechanisms of violence. The aggressor most cited was the intimate partner, the most frequent place of occurrence of violence being the residence and public streets/places. Conclusion: In Brazil, violence affected one in five adults. Women, young people and people with black skin were the population segments most exposed to violence, which should be a priority in prevention actions.

Keywords: Violence. Domestic violence. Intimate partner violence. Health surveys. Cross-sectional studies.

Psostgraduate Program in Health and Community, Universidade Federal do Piauí – Teresina (PI), Brazil.

"Centro de Inteligência em Agravos Tropicais Emergentes e Negligenciados – Teresina (PI), Brazil.

<sup>III</sup>Department of Health Analysis and Surveillance of non-Communicable Chronic Diseases, Secretariat of Health Surveillance, Ministry of Health – Brasília (DF), Brazil.

<sup>IV</sup>Universidade Federal de Minas Gerais – Belo Horizonte (MG), Brazil.

Corresponding author: Márcio Dênis Medeiros Mascarenhas. Avenida Frei Serafim, 2280, Centro, CEP: 64000-020, Teresina (PI), Brasil. E-mail: mdm.mascarenhas@gmail.com

Conflict of interests: nothing to declare. - Financial support: none.

**RESUMO:** *Objetivo*: Estimar a prevalência de exposição à violência, caracterizando sua magnitude, tipos e ocorrência na população adulta do Brasil. Métodos: Estudo transversal com dados da Pesquisa Nacional de Saúde realizada em 2019. Estimou-se a prevalência de violência nos últimos 12 meses e respectivos intervalos de confiança de 95% (IC95%) segundo variáveis sociodemográficas. Razões de prevalência bruta foram estimadas por regressão de Poisson. Resultados: A prevalência de exposição à violência entre adultos no Brasil foi de 18,3% (IC95% 17,8-18,8), com frequência significativamente maior entre as mulheres (19,4%; IC95% 18,7-20,0), no grupo de 18-29 anos (27,0%; IC95% 25,7-28,4), nas pessoas autodeclaradas pretas (20,6%; IC95% 19,3-21,9) e pardas (19,3%; IC95% 18,6-20,1) e entre habitantes da região Nordeste (18,7%; IC95% 18,0-19,5). Entre as vítimas de violência, 15,6% (IC95% 14,2-17,0) procuraram atendimento de saúde, das quais 91,2% (IC95% 88,1-93,6) o receberam. Os tipos de violência mais relatados foram: psicológica (17,4%; IC95% 16,9-17,9), física (4,1%; IC95% 3,9-4,4) e sexual (0,8%; IC95% 0,7-0,9). Os homens foram mais expostos à violência com uso de arma de fogo ou objetivos cortantes, enquanto as mulheres foram as vítimas predominantes para todos os demais tipos e mecanismos de violência. O agressor mais citado foi o/a parceiro/a íntimo/a, e os locais mais frequentes de ocorrência da violência foram residência, vias e locais públicos. Conclusão: No Brasil, a violência afetou um a cada cinco adultos. Mulheres, jovens e pessoas de pele negra foram os segmentos populacionais mais expostos à violência e devem ser prioritários nas ações de prevenção.

*Palavras-chave*: Violência. Violência doméstica. Violência por parceiro íntimo. Inquéritos epidemiológicos. Estudos transversais.

#### INTRODUCTION

Violence is a serious public health problem that affects people of both genders, at all stages of life, from children to aged people<sup>1</sup>. In all its forms, it casts a long shadow over the health of populations and individuals and has spurred several organizations over the past few decades to focus efforts to significantly reduce its prevalence<sup>2</sup>.

Both unintentional and violence-related injuries claim the lives of 4.4 million people worldwide each year and account for nearly 8% of all deaths, still accounting for about 10% of all years lived with a disability<sup>3</sup>. While men are the most frequent victims of fatal and non-fatal physical violence, cases of domestic and sexual violence are more prevalent among women<sup>4</sup>, and one in three of them worldwide suffer some form of abuse by an intimate partner<sup>2</sup>.

Nationally, violence is the sixth largest cause of hospitalizations. Deaths from interpersonal violence have continued to grow significantly since the late 1980s, ranking first among the causes of death in the young population (15–24 years). In 2016 alone, 62,517 intentional violent deaths and 49,497 rapes were recorded in the country<sup>5</sup>.

In addition to physical injuries, violence causes other health effects, such as disability, depression, physical and reproductive health problems, smoking, high-risk sexual behavior, alcohol and drug abuse, and a host of other chronic and infectious diseases, as well as premature death<sup>6</sup>. However, cases of violence and its effects are not evenly distributed between or within countries, as some people are more vulnerable than others, depending on the conditions in which they are born, grow, work, live, and age<sup>3</sup>.

Despite the burden on people's health, the Health sector's involvement in its response is still very limited. However, it is becoming increasingly evident that cases of abuse require attention that goes beyond the treatment of physical injuries<sup>7</sup>, which is more specifically focused on public health actions, which have been defended for their substantial contribution to reducing morbidity and mortality associated with violence around the world<sup>8</sup>.

Given the clinical, social, and epidemiological repercussions of violence, it is essential to carry out studies that present updated information on the extent and characterization of this problem, in order to optimize the understanding related to the dynamics of aggression, in addition to fostering the creation of policies and government actions necessary to control this problem.

This study aimed to estimate the prevalence of exposure to violence, characterizing its magnitude, types, and occurrence in the adult population of Brazil.

#### METHODS

Cross-sectional study developed based on data obtained through the National Health Survey (*Pesquisa Nacional de Saúde* – PNS), carried out by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística* – IBGE) in partnership with the Ministry of Health (MoH) in 2019. The PNS is a baseline survey able to obtain representative estimates for the Brazilian population, disaggregated by urban and rural areas, by large national regions, Federation Units (FU), capitals, and metropolitan regions. Its objective was to provide information on the determinants, conditions, and health needs of the Brazilian population to assist in the development of public policies and to achieve greater effectiveness in health interventions<sup>9</sup>.

A three-stage conglomerate sampling plan was used. In the first, census tracts or sets of tracts were drawn to form the primary sampling units. In the second, the households were selected. In the third, a resident aged 15 years old or older was selected in each household to answer the specific questionnaire, also by simple random sampling, obtained from the list of residents constructed at the time of the interview. Interviews were conducted with 90,846 residents. For questions about violence, 88,531 residents aged 18 years old or older were interviewed, with a non-response rate equal to 16.2% (lower than the planned 27.0%), covering all coverage areas considered in the sampling plan. The total non-response rate was 13.2%, also lower than planned (20%)<sup>10</sup>.

The interviews were carried out with mobile collection devices (MCD), such as smartphones. A trained interviewer described the study objectives and procedures to the resident. Detailed information about PNS can be found in specific publications<sup>9,10</sup>.

In this analysis, only data from informants aged 18 years old or older, who answered positively to at least one of the following questions, using the previous 12 months as a reference, were included:

- psychological violence: "Has anyone offended you, humiliated you or ridiculed you in front of other people? Yelled at you or called you names? Used social networks or mobile to threaten, offend, curse or expose images of yourself without your consent? Verbally threatened to hurt you or someone important to you? Threatened to destroy something of yours on purpose?";
- physical violence: "Has anyone hit or slapped you? Pushed you, held you down, or thrown something at you with the intention of hurting you? Punched, kicked or dragged you by your hair? Tried or actually strangled, choked or burned you on purpose? Threatened or injured you with a knife, fire gun or any other weapon or object?";
- sexual violence: "Has anyone touched, manipulated, kissed or exposed parts of your body against your will? Threatened or forced you to have sex or perform any other sexual acts against your will?".

The prevalence of exposure to violence was calculated and presented according to the following indicators, considering informants aged 18 years old or older in the denominator:

- proportion (%) of adults who reported having suffered some type of violence in the previous 12 months;
- proportion (%) of adults who reported having suffered some type of violence in the previous 12 months and sought some type of health care;
- proportion (%) of adults who reported having suffered some type of violence in the previous 12 months and received some type of health care;
- proportion (%) of adults who reported having suffered psychological violence in the previous 12 months;
- proportion (%) of adults who reported having suffered physical violence in the previous 12 months;
- proportion (%) of adults who reported having suffered sexual violence in the previous 12 months.

The prevalence of indicators of exposure to violence and their respective 95% confidence intervals (95%CI) were calculated for the total adult population in Brazil and disaggregated according to gender (female, male), age group (18–29; 30– 39; 40–59; 60 years old or older), skin color (black; brown; white), education (incomplete elementary/middle school; complete elementary/middle school; complete elementary/middle school; complete high school; and complete higher education), search for and access to health care, types of violence, geographic region, and FU. Crude prevalence ratios (PRc) of violence and respective 95%CI were estimated according to socio-demographic variables using Poisson regression.

The database was obtained directly from the IBGE website in "csv" format and converted to "dat" format. Analyses were performed using the Stata program, version 14, using the survey module, suitable for complex sampling, capable of considering the effects of stratification and clustering in the estimation of indicators and their precision measures.

The PNS was approved by the National Research Ethics Commission (Comissão Nacional de Ética em Pesquisa – CONEP) of the National Health Council (Conselho Nacional

*de Saúde* – CNS), Ministry of Health, under Opinion No. 3.529.376, of August 23<sup>rd</sup>, 2019. Before the interviews, participants agreed to participate in the research by signing the Informed Consent.

## RESULTS

In 2019, 88,531 Brazilian adults aged 18 years old or older were interviewed, of which 18.3% reported having suffered some type of violence in the last 12 months, with a significantly higher frequency among women (19.4%; 95%CI 18.7–20.0) when compared to men (17.0%; 95%CI 16.3–17.7). The prevalence of exposure to some type of violence reached the highest values in the population aged 18–29 years (27.0%; 95%CI 25.7–28.4), among self-declared black people (20.6%; 95%CI 19.3–21.9) and in the group with complete elementary/ middle school education or higher (20.7%; 95%CI 19.4–22.0). Exposure to violence was reported in greater proportion among inhabitants of the Northeast (18.7%; 95%CI 18.0–19.5) and Southeast (18.6%; 95%CI 17.7–19.7) (Table 1).

Table 2 shows the PRc of adults who reported having suffered violence in the previous 12 months. The prevalence of exposure to some type of violence was 14% higher in the adult female population (PR 1.14; 95%CI 1.08–1.20) compared to male adults and almost three times higher in the population aged 18 to 29 years old (PR 2.90; 95%CI 2.64–3.17) compared to people aged 60 years old and older. The black population had a 23% higher prevalence of violence compared to self-declared whites (PR 1.23; 95%CI 1.14–1.33) (Table 2).

Episodes of psychological violence were more prevalent among women (PR 1.16; 95%CI 1.10–1.11) and reduced with increasing age, being significantly more frequent among young people aged 18–29 years (PR 2.63; 95%CI 2.42–2.86) in relation to aged people, mainly affecting self-declared blacks (PR 1.21; 95%CI 1.11–1.31) and browns (PR 1.14; 95%CI 1.08–1.22), in addition to residents of the Southeast (PR 1.12; 95%CI 1.02–1.22) and Northeast (PR 1.11; 95%CI 1.02–1.20). Physical violence was not distinguished according to gender, but it was almost five times more frequent among younger people (PR 4.92%; 95%CI 4.06–5.97) compared to aged people. Physical violence was more frequent among self-declared black people (PR 1.65; 95%CI 1.37–1.98), those who completed elementary/middle school (PR 2.18; 95%CI 1.66–2.85) and among residents of the North region (PR 1.22; 95%CI 1.01–1.47). Sexual violence was significantly more frequent among women (PR 2.34; 95%CI 1.68–3.27), people aged 18–19 years (PR 8.26; 95%CI 4.91–13.89), with education up to complete elementary/middle school (PR 1.60; 95%CI 1.01–2.54) and residents of the Northeast region (PR 1.89; 95%CI 1.26–2.81) (Table 2).

The highest prevalences of exposure to violence were observed in Sergipe, Roraima, Bahia, Mato Grosso do Sul, São Paulo, Pará, and Federal District. Psychological violence was the most reported (17.4%; 95%CI 16.9–17.9), most frequently in Sergipe, Roraima, Bahia, Mato Grosso do Sul, and São Paulo. Physical violence (4.1%; 95%CI 3.9–4.4) predominated in states in the North (Roraima, Pará, and Amapá) and Northeast (Bahia, Sergipe, Piauí,

and Maranhão). Sexual violence (0.8%; 95%CI 0.7–0.9) was more often reported in the states that make up the North, Northeast, and Midwest regions (Supplementary material).

Psychological violence was most frequently manifested through screaming or cursing (76.4%; 95%CI 75.1–77.7), which occurred at a significantly higher frequency among

	Suffered violence Psychological		Physical	Sexual
	% (95%Cl)	% (95%Cl)	% (95%Cl)	% (95%Cl)
Brazil	18.3 (17.8–18.8)	17.4 (16.9–17.9)	4.1 (3.9–4.4)	0.8 (0.7–0.9)
Gender				
Female	19.4 (18.7–20.0)	18.6 (17.9–19.2)	4.2 (3.9–4.7)	1.0 (0.9–1.3)
Male	17.0 (16.3–17.7)	16.0 (15.3–16.7)	4.0 (3.7–4.4)	0.4 (0.3–0.6)
Age range (in years)				
18–29	27.0 (25.7–28.4)	25.3 (24.0–26.7)	7.7 (7.0–8.4)	1.6 (1.3–2.0)
30–39	20.4 (19.4–21.6)	19.7 (18.6–20.8)	4.5 (4.0–5.1)	0.6 (0.5–0.8)
40–59	16.5 (15.8–17.3)	15.7 (15.0–16.4)	3.3 (3.0–3.7)	0.7 (0.5–1.0)
60 or more	10.1 (9.4–10.8)	9.6 (9.0–10.3)	1.6 (1.3–1.8)	0.2 (0.1–0.3)
Color				
Black	20.6 (19.3–21.9)	19.3 (18.0–20.6)	5.2 (4.5–6.1)	0.9 (0.7–1.2)
Brown	19.3 (18.6–20.1)	18.3 (17.5–19.0)	4.9 (4.5–5.3)	0.8 (0.6–0.9)
White	16.6 (15.9–17.4)	15.9 (15.2–16.7)	3.2 (2.8–3.5)	0.7 (0.5–1.0)
Education				
Incomplete Elementary/ Middle School	15.3 (14.7–16.1)	14.4 (13.8–15.1)	3.8 (3.5–4.3)	0.7 (0.4–1.0)
Complete Elementary/ Middle School	20.7 (19.4–22.0)	19.6 (18.4–20.9)	6.2 (5.4–7.1)	0.9 (0.7–1.3)
Complete High School	19.9 (19.0–20.9)	19.0 (18.1–19.9)	4.2 (3.8–4.6)	0.9 (0.7–1.1)
Complete Higher Education	18.8 (17.5–20.1)	18.2 (16.9–19.5)	2.8 (2.3–3.5)	0.6 (0.4–0.8)
Region				
North	18.1 (17.0–19.3)	16.9 (15.9–18.1)	4.7 (4.2–5.3)	0.9 (0.7–1.1)
Northeast	18.7 (18.0–19.5)	17.7 (17.0–18.4)	4.5 (4.1–4.9)	0.9 (0.8–1.1)
Midwest	17.8 (16.7–19.1)	16.9 (15.7–18.1)	4.0 (3.5–4.7)	0.9 (0.6–1.2)
Southeast	18.6 (17.7–19.7)	17.8 (16.9–18.8)	4.0 (3.5–4.5)	0.7 (0.5–1.0)
South	16.7 (15.6–17.7)	15.9 (14.9–17.0)	3.8 (3.4–4.4)	0.5 (0.3–0.7)

Table 1. Prevalence of adults ( $\geq$ 18 years) who suffered violence — psychological, physical or sexual — in the last 12 months, according to demographic variables. Brazil, 2019.

95%CI: 95% confidence interval.

Source: National Health Survey, 2019.

women (79.2%; 95%CI 77.6–80.7), as well as offense, humiliation or ridicule (61.3%; 95%CI 59.4–63.1). Physical violence was manifested, above all, by shoving with the intention of hurting and the use of a knife or firearm. Among women, in addition to shoving (67.4%; 95%CI 62.8–71.6), slapping predominated (47.6%; 95%CI 43.7–51.5), while the use of

Table 2. Crude prevalence ratio of adults ( $\geq$ 18 years) who suffered violence — psychological, physical or sexual — in the last 12 months, according to demographic variables and health consequences. Brazil, 2019.

	Suffered violence	Psychological	Physical	Sexual
	PRc (95%Cl)	PRc (95%Cl)	PRc (95%Cl)	PRc (95%Cl)
Gender				
Female	1.14 (1.08–1.20)	1.16 (1.10–1.22)	1.04 (0.91–1.19)	2.34 (1.68–3.27)
Male	1.00	1.00	1.00	1.00
Age range (in years)				
18–29	2.69 (2.48–2.91)	2.63 (2.42–2.86)	4.92 (4.06–5.97)	8.26 (4.91–13.89)
30–39	2.03 (1.86–2.22)	2.05 (1.87–2.24)	2.90 (2.36–3.57)	3.15 (1.80–5.48)
40–59	1.64 (1.52–7.78)	1.63 (1.50–1.77)	2.14 (1.74–2.62)	3.44 (1.83–6.47)
60 or more	1.00	1.00	1.00	1.00
Color				
Black	1.23 (1.14–1.33)	1.21 (1.11–1.31)	1.65 (1.37–1.98)	1.24 (0.78–1.97)
Brown	1.16 (1.09–1.22)	1.14 (1.08–1.22)	1.54 (1.35–1.75)	1.04 (0.72–1.51)
White	1.00	1.00	1.00	1.00
Education				
Incomplete Elementary/ Middle School	0.82 (0.75–0.89)	0.79 (0.72–0.87)	1.35 (1.10–1.66)	1.12 (0.68–1.86)
Complete Elementary/ Middle School	1.10 (0.99–1.22)	1.08 (0.97–1.20)	2.18 (1.66–2.85)	1.60 (1.01–2.54)
Complete High School	1.06 (0.97–1.16)	1.04 (0.95–1.14)	1.48 (1.16–1.89)	1.55 (1.07–2.23)
Complete Higher Education	1.00	1.00	1.00	1.00
Region				
North	1.08 (0.99–1.19)	1.06 (0.96–1.17)	1.22 (1.01–1.47)	1.74 (1.12–2.69)
Northeast	1.12 (1.04–1.21)	1.11 (1.02–1.20)	1.16 (0.98–1.37)	1.89 (1.26–2.81)
Midwest	1.07 (0.97–1.18)	1.06 (0.95–1.17)	1.04 (0.85–1.28)	1.76 (1.09–2.84)
Southeast	1.11 (1.02–1.21)	1.12 (1.02–1.22)	1.03 (0.85–1.25)	1.47 (0.89–2.44)
South	1.00	1.00	1.00	1.00

PRc: crude prevalence ratio; 95%CI: 95% confidence interval. Source: National Health Survey, 2019.

firearms, knives, and other objects was more reported by men (40.9%; 95%CI 36.9–45.1). Sexual violence was more frequently manifested through touch, manipulation or forced kisses (79.7%; 95%CI 69.1–87.3), but forced sexual intercourse was more frequent among women (57.1 %; 95%CI 48.0–65.8) (Table 3).

Almost half of the violent episodes occurred only once, but recurrence was more reported in cases of psychological (13.4%; 95%CI 12.5–14.4) and sexual violence (13.7%; 95%CI 9.3–19.6) than in physical violence (10.0%; 95%CI 8.2–12.2). The aggressor most often reported was the intimate partner, with a frequency of 45.6% (95%CI 37.5–54.0) in episodes of sexual violence, while the residence was the place with the highest occurrence of physical violence (54.0%; 95%CI 50.8–57.2) (Table 4).

The demand for assistance in health services after the occurrence of violence was 15.6% (95%CI 14.2–17.0), and residents of the Southern (19.1%; 95%CI 16.0–22.6), Southeast (16.4%; 95%CI 13.9–19.4), and Midwest regions (15.4%; 95%CI 12.7–18.5) sought care at a

Turne and mentificate times of violance	Total	Male	Female
Types and manifestations of violence	% (95%Cl)	% (95%Cl)	% (95%CI)
Psychological			
Offense, humiliation or ridicule	59.1 (57.6–60.6)	56.2 (53.9–58.4)	61.3 (59.4–63.1)
Yelling or cursing	76.4 (75.1–77.7)	72.8 (70.5–75.0)	79.2 (77.6–80.7)
Offense or exposure of images on social media	14.2 (13.1–15.3)	14.5 (12.8–16.4)	14.0 (12.7–15.4)
Threat to hurt the victim or someone important to them	31.5 (30.1–32.9)	30.8 (28.6–33.0)	32.0 (30.3–33.8)
Destruction of something from the victim	13.1 (12.2–14.1)	12.6 (11.2–14.3)	13.5 (12.3–14.8)
Physical			
Slapping	43.0 (40.2–45.8)	37.5 (33.5–41.7)	47.6 (43.7–51.5)
Shoving with intention to hurt	62.9 (59.7–65.9)	57.5 (53.3–61.6)	67.4 (62.8–71.6)
Punching, kicking, dragging by the hair	28.9 (26.3–31.7)	30.5 (26.6–34.7)	27.5 (24.2–31.2)
Strangulation, suffocation, burning	9.2 (7.5–11.3)	6.1 (4.3–8.6)	11.8 (9.2–15.2)
Threat or injury with knife, firearm or other objects	33.7 (31.1–36.5)	40.9 (36.9–45.1)	27.7 (24.3–31.3)
Sexual			
Forced touch, manipulation or kissing	79.7 (69.1–87.3)	89.3 (81.9–93.9)	76.1 (62.4–85.9)
Threat or practice of sexual intercourse against the victim's will	50.3 (42.6–58.0)	32.2 (20.9–46.1)	57.1 (48.0–65.8)

Table 3. Prevalence of adults ( $\geq$ 18 years old) who suffered violence — psychological, physical or
sexual — in the last 12 months, according to types and manifestations of violence. Brazil, 2019.

95%CI: 95% confidence interval.

Source: National Health Survey, 2019.

frequency significantly higher than that observed between residents of the Northern region (10.1%; 8.1–12.5). Of every ten people who suffered violence and sought health care, nine were treated (91.2%; 95%CI 88.1–93.6) (Table 5).

## DISCUSSION

The study reveals a chronic problem in the Brazilian population by estimating that around 29 million adult Brazilians have been victims of some type of violence in the last year, most of them having been exposed to psychological violence. A report by the Human Rights Dial service<sup>11</sup> points out that, in 2019, there was a 15.4% increase in complaints of

	, , ,	, _	
	Psychological	Physical	Sexual
	% (95%Cl)	% (95%Cl)	% (95%Cl)
Frequency			
Often	13.4 (12.5–14.4)	10.0 (8.2–12.2)	13.7 (9.3–19.6)
Sometimes	44.2 (42.7–45.8)	34.5 (31.8–37.4)	37.0 (30.5–44.1)
Once	42.3 (40.8–43.9)	55.5 (52.0–58.9)	49.3 (41.3–57.3)
Aggressor			
Intimate partner*	24.5 (23.2–25.9)	35.9 (32.5–39.5)	45.6 (37.5–54.0)
Father, mother, stepfather, stepmother, brother/sister, son/daughter	12.7 (11.7–13.7)	13.1 (11.1–15.5)	_
Other relatives	10.0 (9.2–10.9)	7.9 (6.5–9.7)	_
Friend, colleague or neighbor	22.2 (20.9–23.6)	15.3 (13.2–17.7)	15.4 (11.0–21.3)
General employee or boss	7.1 (6.4–7.9)	-	_
Unknown person	19.6 (18.5–20.8)	22.1 (19.7–24.7)	21.8 (16.8–27.7)
Other	3.9 (3.4–4.4)	5.7 (4.5–7.2)	17.1 (12.6–22.9)
Location of occurrence**			
Household	43.0 (41.5–44.5)	54.0 (50.8–57.2)	52.3 (44.4–60.1)
Workplace***	18.4 (17.2–19.6)	_	19.4 (14.7–25.1)
Public road or place	20.7 (19.6–21.9)	29.0 (26.2–31.8)	21.5 (16.2–27.9)
Internet, social networks or cellphone	10.0 (9.1–11.1)	-	-
Other	7.9 (7.2–8.8)	17.1 (15.0–19.3)	6.8 (4.2–11.0)

Table 4. Distribution of adults ( $\geq$ 18 years old) who suffered violence in the last 12 months according to frequency, aggressor, and place of occurrence by type of violence. Brazil, 2019.

95%CI: 95% confidence interval. \*Includes: previous or current partner (spouse, partner, boyfriend/girlfriend). \*\*Single or most serious occurrence. \*\*\*For sexual violence, includes: educational establishments, bar or restaurant. Source: National Health Survey, 2019.

• • •		
Sought health care	Received health care	
% (IC95%)	% (IC95%)	
15.6 (14.2–17.0)	91.2 (88.1–93.6)	
16.9 (15.2–18.7)	90.9 (87.0–93.7)	
13.2 (11.0–15.8)	92.1 (86.5–95.5)	
12.8 (10.6–15.5)	86.4 (77.4–92.2)	
16.9 (14.2–20.1)	89.0 (81.5–93.7)	
17.9 (15.6–20.6)	94.4 (91.0–96.6)	
13.4 (10.9–16.4)	96.6 (92.1–98.6)	
13.4 (10.0–17.9)	91.7 (79.3–97.0)	
14.8 (13.0–16.9)	90.2 (85.0–93.7)	
17.5 (15.2–20.0)	92.1 (87.4–95.2)	
15.3 (13.0–18.0)	92.0 (86.8–95.3)	
14.2 (11.2–17.8)	91.6 (77.9–97.1)	
14.6 (12.6–16.9)	90.1 (84.7–93.7)	
20.1 (16.7–23.9)	91.5 (82.7–96.0)	
10.1 (8.1–12.5)	84.2 (71.7–91.8)	
14.2 (12.5–16.2)	91.4 (86.2–94.8)	
15.4 (12.7–18.5)	95.2 (90.0–97.8)	
16.4 (13.9–19.4)	90.6 (84.3–94.5)	
19.1 (16.0–22.6)	93.1 (86.8–96.5)	
	% (IC95%) $15.6 (14.2-17.0)$ $16.9 (15.2-18.7)$ $13.2 (11.0-15.8)$ $12.8 (10.6-15.5)$ $16.9 (14.2-20.1)$ $17.9 (15.6-20.6)$ $13.4 (10.9-16.4)$ $13.4 (10.0-17.9)$ $14.8 (13.0-16.9)$ $17.5 (15.2-20.0)$ $15.3 (13.0-18.0)$ $14.2 (11.2-17.8)$ $14.6 (12.6-16.9)$ $20.1 (16.7-23.9)$ $10.1 (8.1-12.5)$ $14.2 (12.5-16.2)$ $15.4 (12.7-18.5)$ $16.4 (13.9-19.4)$	

Table 5. Prevalence of adults ( $\geq$ 18 years) who sought and received health care for having suffered violence in the last 12 months, according to demographic variables. Brazil, 2019.

95%CI: 95% confidence interval.

Source: National Health Survey, 2019.

human rights violations compared to 2018. In this report, allegations of negligence occupied the first position (39%), followed by complaints of psychological (23%), physical (17%), and sexual (6%) violence.

Psychological abuse is any action that puts at risk or damages one's self-esteem, identity or development<sup>12</sup>. Despite its relevance, this injury has been treated in a secondary way, as an adjunct to physical violence, as it is often ignored, considered as part of the natural relationship<sup>13</sup>. This explains the high incidence of its perpetration, as it is more closely associated with everyday interpersonal relationships.

Female victims predominated in all types of violence reported here. According to a previous study, 43% of Brazilian women reported having suffered violence committed by a man in their lifetime and at least 30% admitted to having suffered some form of physical violence, 13% sexual violence, and 27% psychological violence<sup>14</sup>, reaching about a third of the calls in 2017<sup>15</sup>.

A study that determined women's exposure to domestic violence found that, of 26.6% of exposed women, most suffered verbal and emotional violence, stating that the violence occurred because of the instant anger of their partners and that, even after the abuse, they maintained their marriage to ensure that their children did not grow up in a fatherless family<sup>16</sup>.

In addition to the consequences related to mental health, violence has several harmful effects on women's health and well-being, even in their sexual relations and reproductive function<sup>17</sup>. Violence permeates unequal relationships between men and women. It originates in social, economic, political, cultural, and environmental structures, maintaining a strong association with social inequalities and gender relations<sup>18</sup>.

There was a predominance of female victims also in cases of psychological violence. It is noteworthy that the response and responsiveness to stress appear to be different by gender. Due to several underlying biological mechanisms, women tend to be more vulnerable to depression and anxiety disorders and can be particularly affected by stressful events<sup>19</sup>.

Victims aged 18–29 years, self-declared black and brown, and with high education levels stood out among the study participants. This result was corroborated by a research that described the profile of people assisted by aggressions in emergency units in 2011, 2014, and 2017. In it, the black race / color (black and brown) was prevalent among individuals of both genders, having corresponded, in 2017, to 77.5% of men and 72.6% of women. In that same study, the main group of people served was young people aged 15–29 years<sup>15</sup>.

Racial inequality in Brazil is clearly expressed in terms of lethal violence and security policies. Blacks, especially young men, represent the profile of homicide victims in Brazil, being more vulnerable to violence than non-black youth. Likewise, blacks are the main victims of lethal actions by the police and the largest portion of the prison population in Brazil<sup>20</sup>.

By stratifying the cases by region, the Northeast stood out in the number of attacks in relation to other regions of Brazil, especially the South, which had the lowest proportion of exposed individuals. In a study on the evolution of the mortality rate due to aggression in Brazilian geographic regions, the Northeast showed an increase of 5.49% per year in the period 2002–2012<sup>21</sup>. It is noteworthy that, in the 2000s, an intense process of dissemination of violence was observed in this Brazilian region, with an increase in organized crime and drug trafficking in its territory, increasing structural violence and, consequently, gender violence<sup>22</sup>.

The demand for care after exposure to violence was significantly higher in the South, Southeast, and Midwest regions compared to the North region. Considering that pressing aggression charges represents one of the first steps in the search for assistance, a similar result showed that the highest number of reports on Dial 100 came from the Southeast (42.27%), Northeast (28.46%), South (14.08%), Midwest (8.40%), and North (6.79%). When the complaints per 100,000 inhabitants were evaluated, the states of Amazonas, Rio Grande do Norte, and the Federal District emerged as leaders in reports on Dial 100<sup>23</sup>, and the latter also presented one of the highest prevalences of exposure to violence, according to the findings of the present study.

Regarding the means of aggression in cases of physical violence, significant percentages of aggression perpetrated with sharp objects (23.84%) and firearms (10.68%) were found in previous studies, corroborating the findings of this study, especially in relation to male victims. Furthermore, the use of weapons and their combination with other means were associated with a higher risk of death<sup>18,24</sup>. The weapons used in interpersonal violence differ substantially from one type of violence to another, with the most lethal ones, such as firearms or knives, being used in cases of youth violence<sup>6</sup>.

Repeated exposure was mainly reported in cases of psychological and sexual violence. Likewise, the repetition of psychological abuse occurred three times more than the isolated injury in a previous study<sup>25</sup>. It is noteworthy that repeated violence presupposes close contact with the aggressor, often family members and at home, which can contribute to delay in reaching out for health services. In addition, embarrassment, fear of humiliation, and incomprehension often make the victim feel the blame, which contributes for the complaint not to occur, increasing the chances of violence recurrence<sup>26</sup>.

Another finding of the study was the high prevalence of intimate partner violence (IPV). Population-based evidence confirms that IPV, particularly against women, remains a pervasive public health problem involving human rights in the Region of the Americas. In addition, IPV was significantly correlated with young age at first union, as well as with a high number of births and unwanted pregnancies<sup>27</sup>.

The study presents the magnitude of recent violence in adults, according to types and regional and sociodemographic diversity of this phenomenon in Brazil. However, it brings as a possible limitation the use of secondary data, which do not allow extrapolating certain more detailed analyses on the investigated subject. Although the PNS has already addressed violence in the 2013 edition, the 2019 survey does not allow comparisons with the previous version, as there were substantial changes in the questionnaire on violence, which was applied only to people aged 18 years old and older. Thus, the PNS 2019 allowed for the elaboration of a parameter for monitoring the prevalence of violence in adults and prompted further investigations that adopt different methodological approaches, including follow-up studies of more specific population groups.

Thus, violence in Brazil remains a phenomenon that affects female, young, and black individuals unequally. It is necessary that their sociodemographic characteristics are considered when planning and implementing measures to confront violence and its consequences at the individual, family, and social levels. In addition, the need to prepare health systems for the care and monitoring of victims is reinforced, even with referrals to specific services, ensuring the inclusion of victims in lines of care and protection services.

### REFERENCES

- Houry D. Saving lives and protecting people from injuries and violence. Ann Emerg Med 2016; 68: 2. https://doi.org/10.1016/j.annemergmed.2016.02.031
- 2. World Health Organization. Global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children. Genebra: World Health Organization; 2016.
- World Health Organization. Injuries and violence. 2021 [cited on May 28, 2021]. Available at: https:// www.who.int/news-room/fact-sheets/detail/ injuries-and-violence
- Waal MW, Dekker JJM, Kikkert MJ, Kleinhesselink MD, Goudriaan AE. Gender differences in characteristics of physical and sexual victimization in patients with dual diagnosis: a cross-sectional study. BMC Psychiatry 2017; 17: 270. https://doi.org/10.1186/s12888-017-1413-0
- Andrade AB, Azeredo CM, Peres MFT. Exposição à violência comunitária e familiar e autoavaliação de saúde na população brasileira. Rev Bras Epidemiol 2020; 23: e200039. https://doi.org/10.1590/1980-549720200039
- World Health Organization. Global status report on violence prevention 2014. Genebra: World Health Organization; 2014.
- Arenas MAR, Ríos MDM, Borelli CG. Intervenciones en salud pública contra la violencia de odio. Gac Sanit 2018; 32: 2. https://doi.org/10.1016/j.gaceta.2017.10.013
- Senior M, Fazel S, Tsiachristas A. The economic impact of violence perpetration in severe mental illness: a retrospective, prevalence-based analysis in England and Wales. The Lancet Public Health 2020; 5: e99-106. https://doi.org/10.1016/S2468-2667(19)30245-2
- Stopa SR, Szwarcwald CL, Oliveira MM, Gouvea ECDP, Vieira LFP, Freitas MPS et al. Pesquisa Nacional de Saúde 2019: histórico, métodos e perspectivas. Epidemiol Serv Saúde 2020; 29: 5. https://doi. org/10.1590/S1679-49742020000500004
- Instituto Brasileiro de Geografia e Estatística. Pesquisa nacional de saúde: 2019: acidentes, violências, doenças transmissíveis, atividade sexual, características do trabalho e apoio social. Rio de Janeiro: IBGE; 2021.
- Ministério da Mulher, da Família e dos Direitos humanos. Disque Direitos humanos: Relatório 2019. Brasília: Ministério da Mulher, da Família e dos Direitos humanos; 2020.
- 12. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância de Doenças e Agravos Não Transmissíveis e Promoção da Saúde. Viva: instrutivo: notificação de violência interpessoal e autoprovocada. 2ª ed. Brasília: Ministério da Saúde; 2016.

- Paiva TT, Cavalcanti JG, Lima KS. Propriedades psicométricas de uma medida de abuso psicológico na parceira. Rev Colomb Psicol 2020; 29: 1. https:// doi.org/10.15446/rcp.v29n1.72599
- Santos IB, Leite FMC, Amorim MHC, Maciel PMA, Gigante DP. Violência contra a mulher na vida: estudo entre usuárias da Atenção Primária. Ciênc Saúde Coletiva 2020; 25: 5. https://doi.org/10.1590/1413-81232020255.19752018
- 15. Pinto IV, Bevilacqua PD, Ribeiro AP, Santos AP, Bernal RTI, Malta DC. Agressões nos atendimentos de urgência e emergência em capitais do Brasil: perspectivas do VIVA Inquérito 2011, 2014 e 2017. Rev Bras Epidemiol 2020; 23: Suppl 01. https://doi.org/10.1590/1980-549720200009.supl.1
- Duran S, Eraslan ST. Violence against women: affecting factors and coping methods for women. J Pak Med Assoc 2019; 69: 1. PMID: 30623912
- World Health Organization. Strengthening health systems to respond to women subjected to intimate partner violence or sexual violence: a manual for health managers. Genebra: World Health Organization; 2017.
- Barufaldi LA, Souto RMCV, Correia RSB, Montenegro MMS, Pinto IV, Silva MMA. et al. Violência de gênero: comparação da mortalidade por agressão em mulheres com e sem notificação prévia de violência. Ciênc Saúde Colet 2017; 22: 9. https:// doi.org/10.1590/1413-81232017229.12712017
- Sediri S, Zgueb Y, Ouanes S, Ouali U, Bourgou S, Jomli R. et al. Women's mental health: acute impact of COVID-19 pandemic on domestic violence. Arch Womens Ment Health 2020; 23: 6. https://doi.org/10.1007/ s00737-020-01082-4
- 20. Ministério do Planejamento, Desenvolvimento e Gestão. Instituto de Pesquisa Econômica e Aplicada. Fórum Brasileiro de Segurança Pública. Atlas da violência 2018. Brasília: IPEA; 2018.
- 21. Leite FMC, Mascarello KC, Almeida APSC, Fávero JL, Santos AS, Silva ICM. Análise da tendência da mortalidade feminina por agressão no Brasil, estados e regiões. Ciênc Saúde Colet 2017; 22: 9. https://doi. org/10.1590/1413-81232017229.25702016
- 22. Meira KC, Jomar RT, Santos J, Silva GWS, Dantas ESO, Resende EB, et al. Efeitos temporais das estimativas de mortalidade corrigidas de homicídios femininos na Região Nordeste do Brasil. Cad Saúde Pública 2021; 37: 2. https://doi.org/10.1590/0102-311X00238319
- 23. Taveira LM, Oliveira MLC. Perfil da violência contra a pessoa idosa registrada no Disque 100 de 2011 a 2015, Brasil. Geriatr Gerontol Aging 2020; 14: 2. https://doi.org/10.5327/Z2447-212320202000081

- 24. Pinto IV, Bernal RTI, Souza MFM, Malta DC. Fatores associados ao óbito de mulheres com notificação de violência por parceiro íntimo no Brasil. Ciênc Saúde Coletiva 2021; 26: 3. https://doi. org/10.1590/1413-81232021263.00132021
- 25. Rocha RC, Côrtes MCJW, Dias EC, Gontijo ED. Violência velada e revelada contra idosos em Minas Gerais-Brasil: análise de denúncias e notificações. Saúde Debate 2018; 42: sppl 4. https://doi. org/10.1590/0103-11042018S406
- 26. Delziovo CR, Coelho EBS, D'Orsi E, Lindner SR. Violência sexual contra a mulher e o atendimento no setor saúde em Santa Catarina – Brasil. Ciênc Saúde Colet 2018; 23: 5. https://doi. org/10.1590/1413-81232018235.20112016
- 27. Bott S, Guedes A, Ruiz-Celis AP, Mendoza JA. La violencia por parte de la pareja íntima en las Américas: una revisión sistemática y reanálisis de las estimaciones nacionales de prevalência. Rev Panam Salud Publica 2021; 45. https://doi.org/10.26633/ RPSP.2021.34

Received on: 06/02/2021 Revised on: 08/10/2021 Accepted on: 08/30/2021 Preprint on: 09/10/2021 https://preprints.scielo.org/index.php/scielo/ preprint/view/2935

Authors' contributions: MDMM: conceptualization, data curation, formal analysis, writing — drafting, writing proofreading, and editing. ASM: conceptualization, data curation, formal analysis, writing — drafting, writing —proofreading, and editing. MTPR: conceptualization, data curation, formal analysis, writing — drafting, writing — proofreading, and editing. CAB: data curation, formal analysis, writing — proofreading and editing. CML: data curation, formal analysis, writing proofreading and editing. RBC: data curation, formal analysis, writing — proofreading and editing. FMDA: data curation, formal analysis, writing — proofreading and editing. DCM: data curation, formal analysis, writing — proofreading and editing.

© 2021 Associação Brasileira de Saúde Coletiva This is an open access article distributed under the terms of the Creative Commons license.