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Urban violence and risk factors for femicide in the Brazilian Amazon

Violência urbana e fatores de risco relacionados ao feminicídio em contexto amazônico brasileiro

Violencia urbana y factores de riesgo relacionados con el feminicidio en el contexto amazónico brasileño

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Abstract

Femicide has received relatively little research attention, despite its severity. Estimates of femicide depend on the strategies used to define it within the sociocultural and political context. This study aimed to assess intentional homicides of women, focusing on femicides, highlighting the characteristics and risk factors. This was a cross-sectional study based on daily surveillance of homicides in the press and mortality records. The study considered fatal victims of assault in women over 11 years of age in Manaus, Amazonas State, Brazil, in 2016-2017. Classification of femicide was based on Brazil's Law n. 13,104/2015*. Relative risk was estimated by Poisson regression, and a hierarchical model was used to include variables in the models. Analyses were performed in the R statistical package. Of 138 fatal victims of assault, 52 were cases of femicide, or 37.7% (CI: 29.4-45.5). Each unit addition of age reduced the risk of femicide by 3% (CI: 0.95-0.99). Risk of femicide was 40% lower (CI: 0.40-0.90) in women with up to seven years of schooling, when compared to those with eight years or more. Women killed by bodily force showed 5.5 times higher risk (CI: 2.6-11.3) of femicide, compared to those killed with firearms. Relative risk of femicide was 1.4 (CI: 1.1-2.7) in women killed in daytime, compared to those killed at night. The proportion of femicide in this study was lower than in previous estimates in Brazil, and the local burden of urban crime appears to explain part of this discrepancy. This study showed that age, schooling, use of bodily force, and time of day when the assault occurred are associated with femicide.*

Domestic Violence; Homicide; Educational Status; Rape; Risk Factors

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Introduction

Interpersonal violence results in a high burden of morbidity and mortality and thus poses a major public health problem [1]. There were an estimated 390,000 intentional homicides in the world in 2016. Interpersonal violence is the principal cause of years of potential life lost due to premature death in men in Latin America and the Caribbean [2]. Although there are fewer homicides in women (about 25% as many as in men), there is an important difference in their patterns, especially in homicides committed by the intimate partner [3]. About half of the homicides in women are perpetrated by the intimate partner, compared to only 6% of the homicides in men [4].

Given this specificity, intentional homicides of women have been viewed differently, allowing their classification as femicide versus non-femicide. Femicide means the intentional murder of a woman for gender reasons [5]. Still, given the difficulties in classifying such a complex phenomenon [6], some authors have defined femicide more widely, including any intentional murder of women [7,8]. Femicide rates vary according to the sociocultural and political context in which women live [6,9,10,11]. The magnitude of femicide estimates also depends intrinsically on the strategy used to define and count the deaths, which may or may not bear a relationship to gender issues. More flexible definitions tend to overestimate femicides, while more conservative methodologies underestimate or even overlook them [8,12,13].

Higher femicide rates are seen in developing countries, mainly in Latin America and the Caribbean [14]. Data from the gender equality observatory for Latin America and the Caribbean show that approximately 3,000 women in the region were victims of femicide in 2017. El Salvador had the highest rate (10.2 per 100,000 women), and Brazil had an intermediate rate (1.1 per 100,000 women), compared to the other countries included in the survey [15]. Despite the problem's importance, studies on intentional homicides of women (and specifically on femicides) are still scarce in the literature [4,16].

The issue is thus current and requires local and regional policies to produce responses for the 2030 Agenda for Sustainable Development, which proposes the elimination of all forms of violence against women, thereby promoting gender equality. The aim of this study is to assess intentional homicides of women in the city of Manaus, the largest metropolis in the Amazon Region, with a focus on femicide, highlighting its characteristics and associated factors.

Material and methods

This was a cross-sectional study based on information obtained through daily monitoring of homicides in the digital and print press in Manaus, as well as death records provided by the Amazonas State Health Department (Susam). Manaus, capital of the state of Amazonas, Brazil, is the largest economic metropolis in the Amazon region [17], with a population of nearly 2.1 million in 2016, representing more than half of the state's population (Brazilian Health Informatics Department. http://www2.datasus.gov.br/DATASUS/index.php?area=0206, accessed on 05/May/2018). Although the gross domestic product (GDP) of Manaus is quite high, the income distribution is very unequal, with the sixth worse position among Brazil's state capitals and a Gini index of 0.63 [17].

Homicides were defined here as death records available on death certificates in women over 11 years of age in Manaus in 2016 and 2017 and classified as codes X85-Y09, referring to assault, under the International Classification of Diseases, 10th revision (ICD-10) [18]. We also considered probable homicides the violent assaults that resulted in deaths of women over 11 years of age during the same period and that were not classified by Susam as assault, according to the ICD-10, but which received news coverage in more than three different sources in the digital and print press in the state of Amazonas. The underlying cause of death in these homicides was then coded by an experienced classifier with training at the Brazilian Center for Classification of Diseases. The total deaths in both groups were then considered as the final sample of "fatal victims of assault", which were in turn classified as femicide versus non-femicide. The study approach to identification of "femicide" among the cases classified as intentional homicides of women is similar to the criminological methodlogy that considers this type of victimization as a specific crime within the wider range of homicides [19]. The classification of femicide cases was thus based on Brazil's *Law n. 13,104/2015* [20], which defines it as

a type of first-degree murder, included in the list of heinous crimes and that involves domestic and family violence, as well as vilification or discrimination [21]. In other words, in femicide, the woman is murdered precisely because she is a woman.

This classification was performed independently by two criminal lawyers with experience in information on violence and health, based on the victim's and the assailant's antecedents, the circumstances of the death, and the context related to each case. This information allowed the classifiers to determine, based on *Law n. 13,104/2015* and the existing jurisprudence, whether or not the assault was associated with gender violence. Agreement between the two classifiers was assessed with the Gwet AC1 index [22], and in a second phase, discordant cases were resolved by consensus between the two individuals.

The study's online search explored news in specialized sites in the city of Manaus. In addition, two print tabloid-type newspapers specializing in police and crime news were reviewed daily. Mainstream broadsheet newspapers with different sections were excluded because they did not prioritize wide news coverage of homicides. Google (https://www.google.com.br/) search engines were also used as an additional resource with the following terms: "woman", "murdered", "assassinated", and "Manaus" [23].

Data were collected with a previously elaborated form. Records were reviewed weekly by the principal investigator (J.D.Y.O.) in 2016-2017. In March 2018, three months after conclusion of the weekly monitoring of deaths, all the captured records were reviewed in order to avoid duplication and inconsistencies in the data.

The target variables were: assailant's sex; time of the assault (daytime – 06:00 AM to 5:59 PM; nighttime – 6:00 PM to 05:59 AM); number of injuries (1-3, 4 or more); report of alcohol use by the victim; report of sexual violence; area of the body injured (head, neck, chest, upper limbs, lower limbs); type of weapon used by the assailant (firearm, cold steel weapon, or bodily force); whether the assailant was a current or former boyfriend or husband of the victim; site of the assault (residence or public byway/other); and day of the week (Monday through Friday or Saturday/Sunday). Underlying cause of death, age in complete years, race or skin color (white, black/brown), and schooling (0-7 years, 8 years or more) were collected directly from the death certificates.

To estimate relative risk (RR) of femicide, we used Poisson regression with type-HC2 consistent covariance matrix estimator [24]. The simple regression analysis prioritized covariables with p-value < 0.1 in order to avoid discarding potentially important regressors. Multiple regression analysis was performed with the hierarchical approach [25]. The theoretical model was defined "a priori" and included four levels that oriented the hierarchical sequence for introduction of variables in the models. The first level included age and race or skin color; the second was schooling; the third was days of the week of the assault, time of day of the assault, and site of the assault; the fourth level included alcohol use by the victim, number of injuries on the victim, and type of weapon used by the assailant. Backward selection was used, retaining variables with p-value < 0.05 in each of the levels. The preselected variables at each level were retained in the subsequent models, regardless of their p-value, and were also considered risk factors for femicide. We also tested the inclusion of possible interactions in the final model, considering p-value < 0.05. Data were analyzed with the R statistical package, version 3.3.2 (http://www.r-project.org).

The study's protocol was approved by the Institutional Review Board of the National Institute for Amazonian Research (INPA) (protocol n. 1.422.840).

Results

In 2016 and 2017, the study identified 130 homicides and 10 more "probable homicides", totaling 140 cases of "fatal victims of assault". However, in two cases, due to insufficient data for determining the circumstances of the victims' death, it was not possible to determine whether or not femicide had occurred. In the first stage of classification, 138 "fatal victims of assault" were coded as victims of femicide or otherwise, and agreement between the classifiers was 0.79 (CI: 0.69-0.89). Next, the discordant cases were resolved by consensus, reaching a total of 52/138 cases of femicide, or 37.7% (CI: 29.4-45.5). As shown in Table 1, 29% of the total deaths resulted from the victims' direct involve-

Table 1

Circumstances of death in female victims of deadly assault in Manaus, Amazonas State, Brazil, 2016-2017.

Circumstances of death	n	%
Femicide	52	37.7
Directly related to drug traffic *	40	29.0
Deadly robbery	17	12.3
Retaliation for reporting drug traffic in the neighborhood **	8	5.8
Standoff with police	6	4.3
Stray bullet	5	3.6
Other ***	10	7.3
Total	138	100.0

* Drug user or drug dealer;

** Killed by other civilians (the woman herself was not involved in the drug traffic);

*** Involved in robbery, mistaken identify, dispute over property.

ment with the drug traffic (drug users or drug dealers), and another 26% were due to passive actions (victims of deadly robbery, retaliation against civilians not involved in the drug traffic motivated by complaints against drug dealing in the neighborhood, and stray bullets), or the victims' active involvement in criminal activities (standoffs with the police).

As shown in Figure 1, when comparing areas of the body most affected during these homicides, victims of femicide suffered more injuries on the neck (31.3%) than victims of non-femicide violent deaths (13%) (p-value < 0.05). Meanwhile, victims of other violent deaths showed more head injuries (36.2%) compared to victims of femicide (19.8%) (p-value < 0.05). No relevant differences were seen in the proportions of injuries on the chest, upper limbs, or lower limbs (p-value > 0.05).

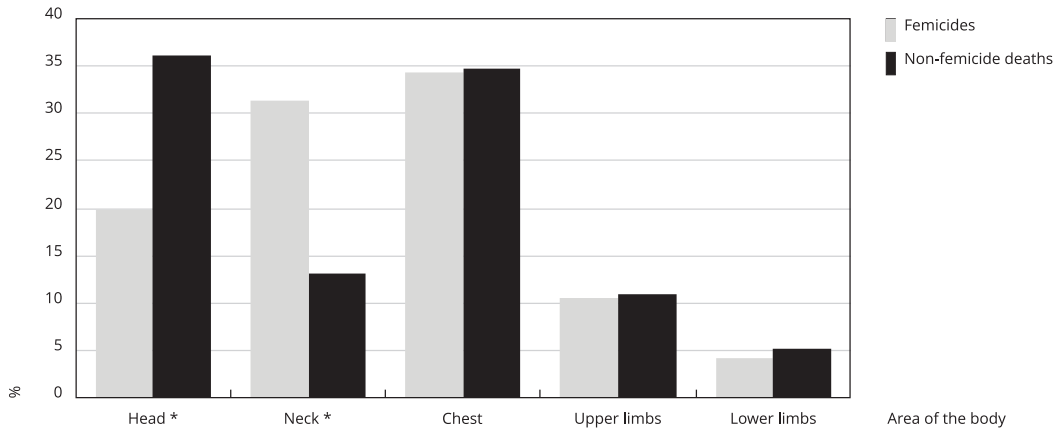
Median age (26 years) was lower in victims of femicide than victims of other violent deaths (32 years). Femicide was proportionally higher in victims with eight or more years of schooling, those killed during the daytime (morning/afternoon), victims of sexual abuse, those killed in their own homes, those killed by a current or former boyfriend or husband, on weekends, those killed with bodily force, those without a direct relationship to the drug traffic, and those with report of alcohol use before the crime (Table 2).

As shown in Table 3, in the multivariate analysis, the covariables age, schooling, time of day of the assault, and type of weapon were associated statistically with femicide (p < 0.05). On average, each unit increase in age resulted in a 3% reduction in the risk of femicide (CI: 0.950-0.988). On average, this risk was 40% lower (CI: 0.40-0.98) in victims with up to seven years of schooling compared to those with eight or more years of schooling. Risk of femicide was 5.5 times higher (CI: 2.6-11.3) in victims killed with bodily force, compared to those killed with firearms. Risk of femicide was 4.2 times higher (CI: 2.0-8.6) in victims killed with cold steel weapons or other weapons compared to those killed with firearms. Women attacked during the daytime had 1.4 times higher risk of femicide (CI: 1.1-2.7) than those attacked at night (6:00 p.m. to 6:00 a.m.).

The final model tested the interactions between age and schooling, between time of day and type of weapon, and between age and type of weapon, all with p-value > 0.05.

Figure 1

Description of the areas of the body with the highest number of injuries, according to the classification of femicide. Manaus, Amazonas State, Brazil, 2016-2017.



* p-value < 0.05 for the chi-square test.

Table 2

Description of sample of probable homicide victims, classified as femicides versus non-femicides. Manaus, Amazonas State, Brazil. 2016-2017.

	Femicides		Other violent deaths		p-value
	n	%	n	%	
Median age (years)	26		32		0.031 *
Race or skin color					
White	2	3.9	6	7.1	0.710 **
Brown/Black	50	96.1	79	92.9	
Schooling (years)					
0-7	19	40.4	54	64.3	0.014 ***
≥ 8	28	59.6	30	35.7	
Assailant's sex					
Male	47	90.4	83	97.7	0.104 **
Female	5	9.6	2	2.3	
Time of day					
Daytime (morning/afternoon)	19	37.3	15	17.6	0.019 ***
Nighttime (night/early morning)	32	62.7	70	82.3	
Number of injuries					
1-3	33	63.5	61	71.8	0.410 ***
≥ 4	19	36.5	24	28.2	
Alcohol use					
Yes	15	28.8	8	9.5	0.007
No	37	71.2	76	90.5	
Sexual violence					
Yes	10	19.2	0	0.0	0.001 **
No	42	80.8	83	100.0	

(continues)

Table 2 (continued)

	Feminicides		Other violent deaths		p-value
	n	%	n	%	
Median age (years)	26		32		0.031 *
Type of weapon					
Firearm	8	15.4	64	74.4	0.001 ***
Cold steel weapon	24	46.1	14	16.3	
Bodily force	20	38.5	8	9.3	
Site of crime					
Home	24	46.1	16	18.6	0.001 ***
Public byway	28	53.9	70	81.4	
Day of week					
Monday to Friday	30	57.7	68	79.1	0.013 ***
Saturday and Sunday	22	42.3	18	20.9	

* Wilcoxon test;

** Fisher's exact test;

*** Chi-square test with correction of continuity.

Table 3

Crude and adjusted risk factors for femicide. Manaus, Amazonas State, Brazil, 2016-2017.

Level	Variable	Crude RR (90%CI)	p-value	Adjusted RR (95%CI)	p-value
	Age	0.978 (0.962-0.994)	**0.024**	0.969 (0.950-0.988)	**0.004**
1	Race or skin color				
	White	1.0			
	Brown or Black	1.6 (0.5-4.6)	0.509	-	-
2	Schooling (years)				
	0-7	0.5 (0.4-0.8)	**0.010**	0.6 (0.4-0.9)	**0.041 ***
	≥ 8	1.0		1.0	
	Site of crime				
	Home	2.1 (1.5-3.0)	**< 0.001**	1.3 (0.9-2.0)	0.145 **
	Public byway	1.0		1.0	
3	Days of week				
	Saturday and Sunday	1.8 (1.3-2.5)	**0.005**	1.4 (0.9-2.1)	0.080 ***
	Monday to Friday	1.0		1.0	
	Time of day				
	Daytime (morning/afternoon)	1.8 (1.3-2.5)	**0.007**	1.7 (1.1-2.7)	**0.031 #**
	Nighttime (night/early morning)	1.0		1.0	
	Number of injuries				
	≥ 4	1.3 (0.9-1.8)	0.303	-	-
	1-3	1.0			
4	Type of weapon				
	Firearm	1.0		1.0	
	Bodily force	6.7 (3.1-10.2)	**< 0.001**	5.5 (2.6-11.3)	**< 0.001 ##**
	Cold steel and other weapon	5.6 (3.1-10.2)	**< 0.001**	4.2 (2.1-8.6)	**< 0.001 ##**
	Alcohol use				
	Yes	2.0 (1.4-2.8)	**0.001**	1.1 (0.7-1.6)	0.793 ###
	No	1.0		1.0	

90%CI: 90% confidence interval; 95%CI: 95% confidence interval; RR: relative risk.

* Adjusted for age;

** Adjusted for age and schooling;

*** Adjusted for age, schooling, site of crime, and time of day;

Adjusted for age, schooling, site of crime, and days of week;

Adjusted for age, schooling, site of crime, days of week, and time of day;

Adjusted for age, schooling, site of crime, days of week, time of day, and type of weapon.

Discussion

In Manaus, approximately 38% of murders of women were femicides, while the remaining deaths mainly resulted from the women's involvement in the illegal drug trade or from passive or active actions by the victims in criminal activities. Age, schooling, time of day when the assault occurred, and use of bodily force and cold steel weapons or other weapons were associated with femicide.

As far as we know, this is the first study based on all homicides that assesses femicide and risk factors in Brazilian women.

The proportion of femicides in our study was similar to that found in a study in Taiwan, based on autopsies, in which the proportion of femicides was 31% [26]. It is also similar to the Brazilian national pattern (around 25%), since according to data from the gender equality observatory for Latin America and the Caribbean, there were 1,133 femicides in Brazil in 2017 [15], and according to the Mortality Information System, there were approximately 4,800 homicides of women that same year (Brazilian Health Informatics Department. http://www2.datasus.gov.br/DATASUS/index.php?area=0205, accessed on 08/Oct/2018). Meanwhile, the point estimate of femicides in Manaus is considerably lower than in other Brazilian studies, although the upper limit of the estimate reaches a proportion of nearly 46%. Importantly, previous studies in Brazil used different criteria to define femicide, for example, defining all homicides of women as femicides, and considering as femicide executions associated with the drug traffic or situations that involved disproportional use of lethal means by the assailant [7,8,27]. Not every homicide is a femicide; especially in areas with high levels of interpersonal violence, cases such as deadly robbery (robbery leading to death) or those involving ordinary delinquency may produce wide variation in the estimates of femicide [12].

Approximately 29% of the victims of other violent deaths were associated with reports of direct involvement with the drug traffic. In general, these victims were drug users and were killed because of unpaid debt to dealers, women who were dealers themselves and were killed in turf wars, or wives or girlfriends of dealers who were killed during settling of scores between factions. Another 26% of the victims had their deaths associated with passive or active actions in criminal activities. The victimization of women by homicide linked to urban violence appears not to be exclusive to Manaus and is relatively common in other large Brazilian cities like Porto Alegre (Rio Grande do Sul State) and Recife (Pernambuco State), among others [28,29,30,31,32].

The high number of violent deaths of women in Manaus is not surprising, considering that from 2007 to 2014 the female incarceration rate in Amazonas more than doubled, from 16.6 to 37.4 per 100,000, with the drug traffic and robbery accounting for approximately 83% of the convictions as of November 2016 [33]. The upward trend in female incarceration rates in Amazonas is consistent with the Brazilian and global patterns. Brazil is one of the five countries of the world that most incarcerates women [34,35].

As for sites of injuries in victims of femicide, there was a low proportion of deaths involving lesions on the head and a high proportion of deaths by firearms among the victims of non-femicide violent deaths (data not shown). Meanwhile, injuries on and around the neck were nearly three times more frequent in femicide victims. Gunshots, especially to the head, are highly lethal [36] and tend to involve premeditated attacks, normally associated with illegal activities such as executions on orders from drug dealers [37,38]. In other studies on femicide, the neck was also one of most frequently affected areas [26].

A study of female homicide victims over 14 years of age in South Africa found that 62% of victims of deadly assault showed high blood alcohol levels, and half the victims had a blood alcohol concentration of 11% (110mg per 100mL of blood) [39]. In a review study that assessed the association between intimate-partner physical or sexual violence and alcohol consumption by women, Devries et al. [40] demonstrated a positive association between alcohol use and victimization by intimate-partner physical or sexual violence. Although report of alcohol consumption did not remain in the final adjusted model, it was nearly 30% in victims of femicide, three times higher than in the group of victims of non-femicide violent deaths (9.5%). Still, we cannot overlook that the records are subject to underestimation, since these data are not from autopsies, unlike other studies.

Although site of the crime was not selected for the final model, nearly 50% of victims of femicide were killed in their own homes, while the vast majority (81.4%) of non-femicide violent deaths

occurred in public. This result is largely expected, since studies on femicide [27,41] and on deadly assaults perpetrated by intimate partners show that the domicile is the most frequent site of fatal assault [42].

Median age of femicide victims was relatively low and much lower than victims of other violent deaths, corroborating a study in Porto Alegre [27] and differing from findings in other countries [23,26]. In Italy, for example, more than half of the victims were over 45 years of age [23]. In addition, our final model showed a protective effect against femicide as women's age increased, suggesting that younger victims are more vulnerable and that femicide may negatively influence premature mortality indicators in these women.

Although physical and sexual violence are known to be the most frequent forms of intimate partner assault against women [40,43], studies on homicide victimization rarely consider investigating and recording sexual assault. Some authors contend that the low frequency of its occurrence and difficulties in operationalizing the category of sexual homicide tend to vary widely between countries and authors, which could explain its relative invisibility [44,45]. In our study, 19.2% of femicides involved a report of sexual violence, similar to a study in North Carolina (United States), on teenage victims of femicide, 8.9% of whom had been raped before the fatal assault [46]. Sexual violence prior to femicide can also be viewed as an indication that these deaths were related to stigmatized occupations such as sex work [23,27,47,48] or even illicit drug use, in which sexual favors are occasionally exchanged as a form of payment [49,50]. Therefore, as in other studies, sexual violence appears as an important component of femicide [51].

Victims with up to seven years of schooling showed 37% fewer femicides when compared to those with eight or more years of schooling. These results are similar to a study in Haiti, where more educated women showed a higher risk of physical and sexual violence than those with less schooling [43]. Our results may reflect the empowerment of women with more schooling, who would tend to react more to psychological abuse, verbal and physical assault, and male possessiveness in a scenario where power relations between genders are still quite asymmetrical.

As for the method used by the assailant, our study showed that risk of femicide was 5.5 times greater in victims killed with bodily force and 4.2 times higher in those killed with cold steel and other weapons, compared to those killed with firearms. The latter were used in fewer than 20% of the femicides, contrary to the means used in other violent deaths, in which firearms reached nearly 80% of the cases. Studies in different contexts concerning the principal means used by assailants to kill their victims have shown that the use of firearms varies upwards or downwards when compared to Manaus, suggesting wide variation in this indicator, depending on the respective context [23,27,41,46,52,53].

The emerging literature on femicide is still incipient and explores a limited number of risk factors, leaving room for more in-depth assessment of such factors as the time of day or night when the assault occurs. In our study, women killed during the daytime showed 69% higher risk of being victims of femicide when compared to those killed at night, which may be related to the scene of the crime, the modus operandi, and the strategies and motivation that led the assailant to commit the crime.

Many issues concerning the determinants, characteristics, and even the definition of femicide still remain unclear. However, in the midst of so many uncertainties, it seems certain that men are the principal assailants. This study, as in various other areas of the world [3,41,52,53,54,55], found that in most femicides the perpetrator is the current or former boyfriend or husband, as opposed to other perpetrators, whether or not they are known to the victim.

The study's results highlight nuances that have received little attention concerning the magnitude of femicide and the associated risk factors, as well as reflections concerning the possible consequences for the victims' families, especially the children [53,55], since many of these murders occur at home, in the environment shared by the family and in the children's presence [23].

The study's principal limitation is information bias, since data extracted from websites and print newspapers are subject to imprecisions and errors, as well as editorial judgment by these media [56]. On the other hand, the data retrieval rate was high in our analyses, especially on sociodemographic data and underlying cause of death, which were collected directly from the death certificates.

Although classification of deaths as femicides and non-femicides was performed independently by two criminal lawyers and their level of agreement was considered good, the discordant cases may reflect different legal interpretations of the same cases or the inherent limits of the amount of data extracted from news stories in the local press.

Although local press coverage aims to disseminate information to the general readership (i.e., not for academic purposes), given the difficulties in performing a study based on multiple sources, the strategy adopted here appears to have been useful for quick, low-cost assessment of femicides.

The study underlines femicide as a relevant source of premature mortality in women and portrays the various contexts in which this type of violence occurs, in this case in a large metropolis in a developing country with high rates of inequality and urban violence, which have a more devastating impact on the number of homicides in women, whether as victims or as active agents in criminal activities.

While revealing the need for more effective responses for the prevention of femicide, especially perpetrated by the victim's current or former partner, the study also highlights the need for more studies on the relationship between fatal victimization and sexual violence in order to shed light on the determinants, the extent of the problem, and above all its visibility vis-à-vis government and society, which is essential for guaranteeing the right to life and the reduction of gender inequities.

Contributors

J. D. Y. Orellana and L. Marrero participated in the study's conception, data interpretation, and final writing of the manuscript. G. M. Cunha, B. L. Horta, and I. C. Leite participated in the data interpretation and critical revision of the manuscript.

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Resumo

Apesar de sua gravidade, o feminicídio é pouco investigado e suas estimativas dependem das estratégias usadas à sua caracterização, do contexto sociocultural e político. Este estudo teve como objetivo avaliar os homicídios intencionais de mulheres, com enfoque nos feminicídios, destacando suas características e fatores de risco. Estudo transversal, baseado em vigilância diária de homicídios na imprensa e em registros de mortalidade. Foram consideradas vítimas fatais por agressões, mortes de mulheres maiores de 11 anos, residentes em Manaus, Amazonas, Brasil, em 2016-2017. A classificação de feminicídios baseou-se na Lei nº 13.104/2015*. O risco relativo foi estimado mediante regressão de Poisson e um modelo hierárquico foi empregado para a introdução das variáveis nos modelos. As análises foram efetuadas no software R. De 138 vítimas fatais por agressões, 52 foram feminicídios, 37,7% (IC: 29,4-45,5). A cada acréscimo unitário de idade o risco de feminicídio reduzia em 3% (IC: 0,95-0,99). O risco de feminicídio foi 40% menor (IC: 0,40-0,90) nas mulheres com até sete anos de escolaridade, em comparação às que tinham oito anos ou mais; as mulheres agredidas mediante força corporal tiveram risco 5,5 (IC: 2,6-11,3) vezes maior de feminicídio, em comparação às que foram agredidas com arma de fogo; e risco de feminicídio de 1,4 (IC: 1,1-2,7) nas que foram mortas durante o dia, em relação às que morreram de noite. A proporção de feminicídio deste estudo foi inferior a estimativas prévias no Brasil e a carga local da criminalidade urbana parece explicar parte desta divergência. Este trabalho demonstrou que idade, escolaridade, uso da força corporal e turno da agressão estão associados ao feminicídio.*

Violência Doméstica; Homicídio; Escolaridade; Estupro; Fatores de Risco

Resumen

A pesar de su gravedad, el feminicidio ha sido poco investigado y sus estimaciones dependen de las estrategias usadas para su caracterización, así como del contexto sociocultural y político. El objetivo de este estudio fue evaluar los homicidios intencionales de mujeres, centrándose en los feminicidios, destacando sus características y factores de riesgo. Se trata de un estudio transversal, basado en la vigilancia diaria de homicidios en prensa y en registros de mortalidad. Se consideraron víctimas fatales por agresiones, muertes de mujeres mayores de 11 años, residentes en Manaus, Amazonas, Brasil, entre 2016-2017. La clasificación de feminicidios se basó en la Ley nº 13.104/2015*. El riesgo relativo se estimó mediante regresión de Poisson y se empleó un modelo jerárquico para la introducción de las variables en los modelos. Los análisis se efectuaron en el software R. De 138 víctimas fatales por agresiones, 52 fueron feminicidios, un 37,7% (IC: 29,4-45,5). Con cada aumento unitario de edad, el riesgo de feminicidio se reducía en un 3% (IC: 0,95-0,99); el riesgo de feminicidio fue un 40% menor (IC: 0,40-0,90) en las mujeres con hasta siete años de escolaridad, en comparación con las que tenían ocho años o más; las mujeres agredidas mediante fuerza corporal tuvieron un riesgo 5,5 (IC: 2,6-11,3) veces mayor de feminicidio, en comparación con las que fueron agredidas con arma de fuego; y un riesgo de feminicidio de 1,4 (IC: 1,1-2,7) quienes fueron asesinadas durante el día, en relación con quienes murieron de noche. La proporción de feminicidio de este estudio fue inferior a las estimaciones previas en Brasil y la carga local de la criminalidad urbana parece explicar parte de esta divergencia. Este estudio demostró que la edad, escolaridad, uso de la fuerza corporal y período del día de la agresión están asociados al feminicidio.*

Violencia Doméstica; Homicidio; Escolaridad; Violación; Factores de Riesgo

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