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ASSOCIATED FACTORS AND PREVALENCE OF TYPES OF VIOLENCE AGAINST WOMEN IN CASES OF MANDATORY REPORTS IN THE STATE OF PARÁ FROM 2014 TO 2016

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ABSTRACT

Violence is a daily phenomenon characterized as a social issue of multiple causes and factors that affects all social classes, especially the most defenseless individuals. Overthirty years ago, violence against women began to receive more attention, becoming a relevant and alarming issue of both Security and Public Health. Thus, this paper aims to verify the distribution of cases of violence against women in mandatory reports in the State of Pará, between 2014 and 2016, and to analyze the prevalence of factors associated with these types of violence. The data used in this study refer to the mandatory reports of violence against women from 2014 to 2016, provided by the State Department of Public Health of the State of Pará (*SESPA*), on January 31, 2017, to the Group of Studies and Statistical and Computational Research (*GEPEC*) and the Laboratory of Information System and Georeferencing (*LASIG*). The types of violence against women reported demonstrate the need for more specialized departments to deal with such violence, as well as indicate new waystosolve this problem of public safety.

INTRODUCTION

Violence is characterized by corrupted, impatient and anger-based action, which does not seek to establish a dialogue based on conviction, but only physical, moral and psychological aggression. It is an important indicator of health risk, with consequences for physical and mental development. According to Andrade and Fonseca (2008), a little more than thirty years ago, the dilemma of violence against women began to receive more attention, being reported more frequently and treated with more particularities, thus requiring the search for solutions through public policies, since it presents itself as a relevant and alarming issue for society. Often referred to as "domestic violence" when practiced among members who live in a common family environment, gender-based violence is undoubtedly a situation that affects both men and women (Silva, Oliveira, 2016). However, statistical data indicate that the victims are essentially women, as it is an issue present in all the historical phases related to the communities and societies considered sexist and patriarchal (BARBANO, CRUZ, 2015). The high rates of violence against women led to the approval of Brazil's Federal Law 11340-2006, commonly known as *Maria da Penha Law*, which was put into practice on September 22, 2006, and classified violence against women in the following categories: physical violence, moral violence, patrimonial violence, psychological violence and sexual violence (BRASIL, 2006). In this sense, violence against women is not restricted to a specific context or group and does not differentiate between race, age or social status of individuals. The big difference is that women end up being silenced against the violence they receive, either by fear, shame or even financial dependence (SILVA, OLIVEIRA,

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2015). The types of violence against women are known as: a) *physical violence*, which is characterized by the act or negligence that places the victim's physical condition in a situation of vulnerability and may even affect their health in a chronic or momentary manner; b) *psychological and moral violence,* that primarily affect the emotional integrity of women, aiming to control behaviors and decisions, and inhibit free will by authoritarian warnings, threats, subjection, isolation, or any attitude that interferes with self-determination and disrupts the honor and reputation of the victims; c) *patrimonial violence*, which is characterized by the action that causes damages in relation to the assets of the victim, such as documents, objects and values; and d)*sexual violence*, which forces the victim to maintain physical, sexual or oral contact with the aggressor, being one of the most atrocious forms of violence, because it consists in the violent appropriation and invasion of the body (Brasil, 2006).Women regularly find it very difficult to report such acts of violence for fear of exposure and because of their insecurities regarding the aggressor, which make them even more vulnerable, since abusers can usually tell when their victims are feeling intimidated. According to Novellino and Santos (2015), violence against women in the domestic environment is characterized by unbalanced relationships, in which men find themselves in the right to coerce and intimidate their wives through violence. This control in maintained continuously, causing problems in the sexual, familiar and social life of the victims. Schraiber *et al.* (2010) argue that the conflicts which generate violence are the result of inequalities of action and possession in personal and social relations, in which the causes does not result from a specific person or family exercise, but from the culture inserted and the way in which the affective bonds are built, increasing the assimilation of violence against women as a result of the marital context and the social relations. In the perspectives on the subject, violence against women began to be discussed not only within the context of Public Security, since international bodies such as the World Health Organization (WHO) have come to recognize it, in the last decades, also as a problem of Public Health (BORSOI; Brandão; Cavalcanti, 2009).

In Brazil, over the last 20 years, services have been created to address the issue, such as women's police stations, shelters and multi-professional reference centers that have focused mainly on physical and sexual violence committed by women's sex partners and ex-partners. In the last decade, since the approval of Law11340, sexual violence services for the prevention and prophylaxis of sexually transmitted diseases (STDs), unwanted pregnancies and legal abortion were created. It is known that the high rates of violence against women in Brazil do not truthfully reveal the situation of the problem, due to the difficulty to find and assign the cases, which creates indecisions in the elaboration of studies that aim at planning for the combat of this dilemma, as a consequence of underreporting, in which cases are not informed to the authorities (SILVA *et al.*, 2013). In this context, the present study aims to verify the distribution of cases of physical, moral, psychological and sexual violence against women in mandatory reports, in the State of Pará, between 2014 and 2016, and to analyze the prevalence of factors associated with these types of violence.

MATERIALS AND METHODS

Area Description: This study is based on data from the State of Pará (Figure 1), the second largest federative state in Brazil, formed by 144 municipalities and a population of 8,272,724 inhabitants, distributed in an area of 1,247,954,666 km² (IBGE, 2010). The capital and largest city is Belém.

Data: The data used in this study was provided by the State Department of Public Health of the State of Pará (SESPA), on January 31, 2017, to the Group of Studies and Statistical and Computational Research (*GEPEC*) and the Laboratory of Information System and Georeferencing (*LASIG*), both located in the Federal University of Pará. The data refer to mandatory reports (compulsory and comprehensive annotation of notifications, which is designed to promptly administer cases requiring monitoring and concentration) of 26,079 cases of violence in health services in the State of Pará, from 2006 to 2016.

Figure 1. Geographic location of the State of Pará in 2015

Description of Variables

In this study, we selected only the cases reported in the period from 2014 to 2016 of women who were 18 years of age or olderand had suffered at least one of the following types of violence: physical, moral, psychological and sexual. Each violence is considered as a variable and its categories are *yes* (the woman sufferedviolence) and *no* (the woman did not suffer violence). Any case that presented category of the Type of Violence variable with more than one response was multiplied according to the number of responses. Thus, a single type of violence was distributed for each new observation and for the original observation, so that each observation of the database presented a only one violence. The following variables were used in this study: (*i*) *Year of report*; (*ii*) *Type of violence*, which includes the *physical violence*, *moral and psychological violence* and *sexual violence* categories and their combinations, had the victim suffered more than one type of violence; (*iii*) *Stage of life*, in which women who were 18 to 59 years of age were classified as *adult,* and those who were 60 orolder as *elderly*; (*iv*) *Level of Education*, in which the categories are *illiterate*, *incompleteprimary education*, *fullprimary education, full secondary education* and *full tertiary education*, since there was no record of victims within the time cutting frame with incomplete secondary education or incomplete tertiary education; (*v*) *Marital status*, whose categories are *single*/*divorced* and *married*/cohabitation; and finally (*vi*)*Use of alcohol*, whose categories indicate whether or not the abuser consumed alcoholic drinks to commit violence.

Exploratory Data Analysis

The Exploratory Data Analysis is a statistical technique that consists of a set of tools with the purpose of organizing, summarizing and describing important characteristics of a data set, by means of (*i*) graphics, which is a form of dynamic representation of the data in the table, being more efficient for visualizing the information; (*ii*) tables, which are a non-discursive method of displaying information, using numeric data and symbols, sorted according to the variables analyzed in the phenomenon under study; and (*iii*) synthesis measures for a better visualization and interpretation of the results and the information, with which one can obtain conclusions about the variable under study (BUSSAB; MORETTIN, 2013).

Correspondence Analysis

According to Fávero *et al*. (2009), the correspondence analysis is an exploratory statistical technique used to verify associations or similarities between qualitative variables or categorized quantitative variables. To validate the use of this technique it is necessary to follow some assumptions. Firstly, for its application, Pestana and Gageiro (2005) recommend that the chi-squared test (χ^2) be performed to verify the existence of dependence between the variables under study. With the rejection of the null hypothesis (H_0 =independent variables) in the chi-squared test (χ^2), the next step is to calculate the criterion β to verify the dependence between the categories of the variables, in which the hypotheses tested are H_0 (the categories of the variables are independent) and H_1 (the categories of the variables are dependent). If the value of $\beta \geq 3$, the rejection of the null hypothesis (H_0) is indicated, concluding that the categories of the variables are associated with each other. Another important assumption to be analyzed

is the calculation of the inertia percentage, referring to the variation explained by each dimension. According to Ramos *et al*. (2008), when using the simple correspondence analysis the associations are propagated in a two-dimensional plane, so the sum of the inertia percentage of dimensions 1 and 2 must be equal to or greater than 70% for the results to be valid. Finally, after obtaining the values of the residues which are defined by the difference between the expected and observed frequencies, the confidence coefficient (γ) is calculated to verify the significance of the calculated residues (RAMOS *et al*., 2008). The associations between the categories are considered significant when the value of the confidence coefficient indicates moderately significant probabilities, that is, when $50\% \leq \gamma \times 100 < 70\%$ or when the confidence coefficient value indicates strongly significant probabilities, that is, when the it reaches at least 70%.

RESULTS

Table 1 shows the evolution of the distribution of types of violence between 2014 and 2016, where moral or psychological violence and physical violence are verified in the majority of cases, respectively with 5,253 and 4,361 cases each, similarly to a study by Novellino and Santos (2015), which also identifies the prevalence of these types of violence during the period analyzed. According to the authors, the increase in psychological violence is a result of the validity of the Maria da Penha Law, in which the perpetrators became afraid of being actuated by law and thus started to make more threats, and also because women were made aware of the possibility of reporting such violence, which contributed to an increase in the number of reports. In addition, there is a noticeable decrease in reports of violence against women, and 2014 was the year that presented the most reports, with 4,560 cases. This decrease had also been observed in other units of the federation, through the studies of Kind *et al.* (2013), and Campos and Almeida (2017), which already showed a decrease in previous years. The decrease in the number of reports can be credited to the fact that with the implementation of the *Maria da Penha Law*, there was greater monitoring and attention to women victims or subjected to violence and, consequently, fewer occurrences of cases that reach the health services as last alternative, when they are more serious.

Table 1. Number of reported cases of violence against women in relation to type of violence, in the State of Pará, from 2014 to 2016, by year of report

Types of Violence	Yearofreport			Total
	2014	2015	2016	
Physical	1859	1290	1212	4361
Moral/psychological	2480	1363	1410	5253
Sexual	221	153	173	547
Total	4560	2806	2795	10161

In Table 2, it can be seen that the descriptive values (*p*-value), together with the Beta Criterion value ($\beta \geq 3$), indicate that both the variables and their categories are dependent, at any level of usual significance. It is also noted that the sum of the inertia percentages indicate that more than 70% of the information was restored by the Correspondence Analysis, thus confirming that all assumptions are satisfied, making the Correspondence Analysis significant. Table 3 presents the residuals and confidence levels (γ), in parentheses, resulting from the application of the Correspondence Analysis to the categories of variables *versus* type of violence against women reported in the State of Pará, between 2014 and 2016.

Table 2. Values of Chi-squared (χ^2), Criterion β, Inertia percentage and *p*-value (*p*) for the variables of the reported cases of violence against women in the State of Pará, from 2014 to 2016

Variables	χ^2	β	% Inertia	*p*
Stage of Life *versus* Type of Violence	19,96	12,70	100,00	0,000
Level of Education *versus* Type of Violence	137,68	45,85	100,00	0,000
Marital Status *versus* Type of Violence	52,21	35,50	100,00	0,000
Indication of Alcohol *versus* Type of Violence	49,75	33,76	100,00	0,000

Table 3. Residues and levels of confidence resulting from correspondence analysis applied to the variables of reportedcases of violence against women in the State of Pará, from 2014 to 2016

Variable	Category	Type of Violence		
		Physical	Moral/Psychological	Sexual
Stage of Life	Adultperson	0,44(33,69)	-0,45(0,00)	0,29(23,15)
	Elderlyperson	-2,71(0,00)	2,79(99,47)*	-1,83(0,00)
Level of Education	Illiterate	1,59(88,84)*	-3,10(0,00)	6,25(100,00)*
	Incomplete Primary Education	3,49(99,95)*	-2,73(0,00)	-0,63(0,00)
	FullPrimary Education	2,68(99,27)*	-2,09(0,00)	-0,52(0,00)
	Full Secondary Education	-3,67(0,00)	3,04(99,76)*	0,12(9,26)
	Full Tertiary Education	-4,18(0,00)	3,71(99,98)*	-0,77(0,00)
Marital Status	Single	-1,79(0,00)	0,18(14,31)	4,63(100,00)*
	Married/Cohabitation	1,89(94,13)*	-0,19(0,00)	-4,89(0,00)
Use of Alcohol	Yes	3,81(99,99)*	-3,24(0,00)	0,21(16,63)
	No	-3,78(0,00)	3,22(99,87)*	-0,21(0,00)

Note: **Moderately significant probabilities, since 50% ≤ γ × 100 <70%.

*Probabilities strongly significant, since γ × 100≥70%.

Based on the table, it can be affirmed that elderly women are strongly associated with victimization due to moral or psychological violence (99.76%). The presence of violence of moral or psychological origin among elderly women was already stated by Mascarenhas *et al*. (2012).According to their study most reports of moral or psychological violence presented a significantly higher frequency among elderly women. In relation to the level of education of the victims, it is verified that illiterate women are strongly associated with the victimization of physical and sexual violence, respectively with 88.84% and 100.00%.Victims with incomplete and full secondary education have a statistical association with victimization of physical violence (99.95% and 99.27% respectively), while women with secondary education are strongly associated with victimization of moral or psychological violence (99.76%).It is also possible to verify that victims with fulltertiary education are strongly associated with the occurrence of moral or psychological violence (99.98%) (Table 3). These results reinforce data from the study by Labronici *et al*. (2010), which found that the majority of women with incomplete and full primary education had suffered physical, psychological, sexual and also structural violence (violence generated by economic and cultural doctrines that lead to humiliation), but with greater prevalence of physical and psychological violence compared to sexual violence. In the case of women who have completed secondary education, there is a disagreement compared to the study by Labronici *et al*. (2010), which indicates that the majority of women with full secondary education suffered physical violence, since the results of this study indicate the prevalence of moral or psychological violence for such level of education. On women who have incomplete and full tertiary education, both results indicate the prevalence of moral or psychological violence. When analyzing the marital status of the victims in Table 3, it is observed that single women have a strong statistical association with sexual violence victimization (100.00%), and married women or women in a cohabitation have a strong statistical association with victimization due to physical violence (94.13%).

It can be verified from the results that single women tend to be victims of sexual violence, a result that is the same as that found in the literature (FACURI *et al*., 2013), where 76.10% of women suffered sexual violence. In relation to the literature about married women or those in a cohabitation and victimization due to physical violence, a divergence was found in the study by Dossi *et al*. (2008), where only 28% of women who are victims of physical violence are married. It was also possible to verify that married women or women in acohabitation are also victims of physical violence. This observation is different from the study by Leite *et al*. (2017), which show the prevalence of married women and women in cohabitation as victims of psychological violence. However, this result is in agreement with those of Vieira, Perdona and Santos (2011). Physical violence affects almost half of the women, being the main type of aggression in cases of domestic violence, in which about a quarter of the time the aggressor is a partner or ex-partner (ANDRADE and FONSECA, 2008).

It is also noted in Table 3 that the practice of physical violence is strongly associated with the presence of alcohol (99.99%) and the practice of moral or psychological violence is strongly associated with non-involvement of alcohol (99.87%). The result regarding the use of alcoholic drinks and the perpetration of violence against women was already observed in the study by Dossi *et al*. (2008), but the one presented in this study is different, since the data indicate that there was no consumption of alcoholic beverages during the occurrence of physical violence. However, this study resembles that of Gadoni-costa, Zucatti and Dell'aglio (2011), when it discusses the prevalence of the use of alcohol contributes for physical violence and differs from the same study when it associates moral or psychological violence with the absence of alcohol consumption.

Conclusion

This study allowed us to conclude that in cases of violence against women reported in the State of Pará, there was a prevalence of moral or psychological violence. In 2014 there

were more reports of cases of violence than in subsequent years. Regarding the factors analyzed by type of violence received, it is concluded that women who suffered physical violence are married, with incomplete or full primary education, and the aggressor was under the effect of alcohol. The victims who suffered moral or psychological violence are elderly women with, who have completed at least full secondary education and the aggressor were not consuming alcoholic drinks. On the other hand, sexual violence was suffered by illiterate unmarried women. Thus, one may conclude that the stage of life, the level of education and the marital status are all related to the types of violence suffered by the victim. The main results of this study point to the prevalence of moral or psychological violence. In conclusion, this study aimed to collaborate in solving the problem of violence against women, to be faced as a matter of public security, and to propose ways of intervention by the appropriate professionals who receive the demand of reports, and also by the victims themselves who have the ability to change certain situations. Therefore, it is proposed that the care services for women at risk should be held in a more specialized way in order to tackle violence, and new public policies are necessary.

Acknowledgments

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