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CHARACTERIZATION OF SEXUAL VIOLENCE IN A STATE FROM THE SOUTHEAST REGION OF BRAZIL

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ABSTRACT

Objective: to verify the association between victims of sexual violence and the sociodemographic aspects related to exposure in the state of Minas Gerais, Brazil.
Method: an ecological study, where the database of the *Sistema de Informação de Agravos de Notificação*, SINAN provided by the Minas Gerais State Health Department was used. Data were analyzed using descriptive statistics, the chi-square test, and Multiple Correspondence Factor Analysis ($p \leq 0.05$).
Results: stepfathers were the predominant offenders, associated with schooling from 0 to 4th grade, brown-skinned ethnicity, and the residence as place of occurrence. When the offender was the father, there was association with an unknown place of occurrence, followed by the residence, abuse of male children between 0 and 9 years old, and living in municipalities from 200 to 500 thousand inhabitants. Stranger aggressors were associated with white female victims aged 15 years old or over, schooling between 5th grade and higher education, single act of sexual violence, in which physical violence was used and occurrence on public roads.
Conclusion: sexual violence affects mainly women and children, the former being attacked on public roads and the latter in their own home environment by a known offender.

DESCRIPTORS: Sexual violence. Women's health. Violence against women. Child health. Sex offenses.

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CARACTERIZAÇÃO DA VIOLÊNCIA SEXUAL EM UM ESTADO DA REGIÃO SUDESTE DO BRASIL

RESUMO

Objetivo: verificar a associação entre vítimas de violência sexual e aspectos sociodemográficos relacionados à exposição no estado de Minas Gerais, Brazil.
Método:estudo ecológico, utilizou-se o banco de dados do Sistema de Informação de Agravos de Notificação obtido na Secretaria do Estado de Saúde de Minas Gerais referente a 2016. Para análise dos dados, utilizou-se estatística descritiva, teste Qui-quadrado e Análise Fatorial de Correspondência Múltipla (p≤0,05).
Resultados: destacou-se como agressor o padrasto, associado à escolaridade de 0 a 4ª série, raça parda e local de ocorrência a residência. Quando o agressor foi o pai, houve associação com o local de ocorrência ignorado, seguido do local de ocorrência residência, abuso em crianças de 0 a 9 anos, do sexo masculino, e que pertenciam a municípios entre 200 e 500 mil habitantes. Já o agressor desconhecido foi associado com vítimas mulheres, brancas, com 15 anos ou mais de idade, escolaridade entre 5ª série e ensino superior, violência sexual única, em que foi utilizada violência física e ocorrência em vias públicas.
Conclusão: a violência sexual atinge principalmente mulheres e crianças, sendo as primeiras acometidas em via pública e as crianças em ambiente domiciliar com agressor conhecido.

DESCRITORES: Violência sexual. Saúde da mulher. Violência contra a mulher. Saúde da criança. Delitos sexuais.

CARACTERIZACIÓN DE LA VIOLENCIA SEXUAL EN UN ESTADO DE LA REGIÓN SUDESTE DE BRASIL

RESUMEN

Objetivo: comprobarla asociación entre las víctimas de violencia sexual y los aspectos sociodemográficos relacionados con la exposición en el estado de Minas Gerais, Brasil.
Método: estudio ecológico en el que se utilizó la base de datos del Sistema de Información de Agravios de Notificación obtenido de la Secretaría de Salud del estado de Minas Gerais referente al año 2016. Para el análisis de los datos, se utilizó la estadística descriptiva, el test de Chi-cuadrado y el Análisis Factorial de Correspondencia Múltiple (p≤0,05).
Resultados: el agresor predominante fue el padrastro, asociado con una escolaridad de 0 a 4º grado, raza mestiza y con el domicilio particular como lugar del hecho. Cuando el agresor fue el padre, se registró una asociación con un lugar del hecho desconocido, seguido por el domicilio particular, abuso de niños de 0 a 9 años, de sexo masculino, y que residían en municipios de entre 200 y 500 mil habitantes. Se asoció al agresor desconocido con víctimas mujeres, de raza blanca y al menos 15 años de edad, con escolaridad entre 5º grado y enseñanza superior, y una única instancia de violencia sexual, con uso de violencia física y en la vía pública.
Conclusión: la violencia sexual afecta principalmente a mujeres y niños; las primeras son abordadas en la vía pública y los niños en el ambiente del domicilio por parte de un agresor conocido.

DESCRIPTORES: Violencia sexual. Salud de la mujer. Violencia contra la mujer. Salud infantil. Delitos sexuales.

INTRODUCTION

The World Health Organization (WHO) defines violence as the intentional use of physical force or power, against oneself, other people or society, with the possibility of causing injury, death, psychological damage or damage to development.[1–2]

Violence is present in all societies, social classes and races, and it should not be considered as normal, since it has relevant consequences for the health of the world population. In Brazil, since the 80's, attempts have been made to implement measures to reduce related indicators and avoid it.[3]

According to the WHO, sexual violence is any sexual act or attempt towards an unwanted act, or acts to traffic with a person's sexuality, with attitudes such as repression, threats, or physical force, practiced by anyone regardless of their relationship with the victim, in any setting, and it is not limited to the home or work environment.[4]

Globally, 7% of women are victims of sexual violence by people who are not their intimate partners. When intimate partner sexual violence is considered, prevalence varies from 29.8% in the Americas, 25.4% in Europe, 37.0% in the Mediterranean region, 37.7% in Southeast Asia, 24.6% in the Pacific region, and 23.2% in high income countries. In childhood, the prevalence of sexual violence is 18% among girls, 7.6% among boys;[5] this sort of violence is experienced by up to 70% of refugee women.[6]

Rape is one of the most common forms of sexual violence and affects approximately 1 in 5 women and 1 in 59 men. For women who are raped, in 28% this episode occurred for the first time when they were 10 years old or younger, and 35% of the raped children were also raped as adults. Between 20% and 60% of women do not tell anyone about intimate partner violence, and of those who have suffered injuries, only 48% seek help to treat their injuries.[7]

In Brazil, the Health Department estimates that a rape occurs every 11 minutes, totaling more than 500,000 cases annually; of these, nearly 10% contact police. With regard to children in situations of sexual violence, 24% of the offenders are their fathers or stepfathers; and 32% of these children are assaulted by family's acquaintances, friends or child's acquaintances.[8] In Brazil, sexual violence accounts for 66% and 40.4% of the cases of violence against 10-14 and 18-39 year-old individuals, respectively,[9] and corresponds to approximately 5.6% of reported violence against women in the state of Minas Gerais.[10]

Sexual violence has serious consequences for the lives of people affected by violence and of their families,[11] being related to the gender social roles assumed by women and men in society, which are marked by relations of submission and power. It affects all ages, ethnicities, social classes and genders and occurs mainly to young women and adolescents, causing psychiatric disorders such as depression, post-traumatic stress disorders, sexual disorders, chronic pain, increased use of psychoactive substances, exposure to sexually transmitted diseases, and unwanted pregnancy.[2,12–13]

Generally, parents or guardians seeking professional care for children in situations of sexual violence report symptoms such as abdominal pain, genital injuries, urinary tract infections and anxiety, aggression, and fear behaviors; they often do not report or mention violence or abuse perpetrated against the child. These children are prone to psychiatric disorders, suicidal thoughts, and the use of chemicals. A study carried out in Africa by the World Health Organization (WHO) shows the relationship between poverty and maltreatment in children, revealing that there is a greater number of child sexual abuse in places where unemployment and poverty rates are higher.[14]

Since 2009, the Health Department has established the compulsory notification of acts of violence, continuously and in the whole country, to the Notification Disease Information System (Sistema de Informação de Agravos de Notificação, SINAN) -by all public or private health care facilities that provide care to people in situations of sexual violence,[15] and by means of the form for Domestic, Sexual and/or Other Forms of Interpersonal Violence, including sexual violence.

Care management should be promoted in care services in an articulated and networked way.[16] Nursing skills are essential in this care process, covering from identification of cases of violence to promotion of treatment adherence and referral to psychosocial care, protection and health networks.

Primary care provided to victims of violence must guarantee the clarification of their rights and provide a humanized welcome; to this end, nursing professionals should be aware of the profile of those affected by sexual violence, the surveillance/notification system, and the national policy on violence against women.[10]

Therefore, the aim of this study was to investigate the association between sociodemographic and exposure variables among people in situations of sexual violence in the state of Minas Gerais, Brazil.

METHOD

This study has an ecological and analytical design, based on the analysis of the database with reports of Domestic, Sexual and/or Other Types of Violence notified to the SINAN obtained from the Minas Gerais State Health Department for 2016.

At first, all the municipalities in the state participated in the study. After analyzing the number of reported cases of sexual violence per municipality, a cutoff point was defined according to statistical feasibility, considering as inclusion criteria municipalities with 10 or more reports of sexual violence in the SINAN. Thus, 48 municipalities were included.

The participants of the study were people of all ages and of both genders, residents in the state of Minas Gerais, who suffered sexual violence and attended a health service where the SINAN violence notification/investigation form was completed in 2016. The records of people who suffered other types of violence or who were not residents in the state of Minas Gerais were excluded.

In order to describe the epidemiological profile of the cases, descriptive statistical analyses of the data were performed. The analysis of the association between sociodemographic profile and exposure to sexual violence was performed using Multiple Correspondence Factor Analysis (MCFA) and the chi-square test. The following active variables were used: age, gender, ethnicity, schooling, population size of the municipality, place of occurrence, if the act of violence occurred more than once, if there was also physical and/or psychological violence. The supplementary variable was the relationship between victim and offender. MCFA consists of examining the relationships between active and supplementary categorical variables in a factorial plan. The relationships of geometric proximity between the points in the factorial plan allow us to interpret the associations between the categories of variables. The active variables participate in the calculation of the position of each individual in the factorial plan and the supplementary variables do not contribute to the calculation, but they will be associated with the active variables in the factorial plan by similarity.[17]

The computerized database was handled only by the research team and received without variables of personal identification of the victims.

RESULTS

In 2016, of the 853 municipalities of Minas Gerais, 48 reported 10 or more cases of sexual violence to the SINAN, totalling 1996 notifications. The 48 municipalities are listed below (Table 1); of these, Belo Horizonte, Uberaba, Juiz de Fora, Betim, Uberlândia and Contagem were the ones with the highest number of cases.

Table 1 – Distribution of the frequency and proportion of municipalities reporting more than 10 cases of sexual violence. Minas Gerais, Brazil, 2016. (n=1996)

Municipalities	n	%
Belo Horizonte	478	23.9
Uberaba	158	7.9
Juiz de Fora	139	7.0
Betim	115	5.8
Uberlândia	108	5.4
Contagem	102	5.1
Montes Claros	82	4.1
Viçosa	59	3.0
Ipatinga	53	2.7
Ribeirão das Neves	51	2.6
Governador Valadares	46	2.3
Ibirité	37	1.9
Muriaé	36	1.8
Araxá	32	1.6
Teófilo Otoni	27	1.4
Sabará	26	1.3
Patos de Minas, Santa Luzia	25	1.3
Sete Lagoas	23	1.2
Diamantina	21	1.1
Conselheiro Lafaiete, Esmeraldas	18	0.9
Coronel Fabriciano	17	0.9
Taiobeiras	16	0.8
Leopoldina, Patrocínio, Poços de Caldas, Santana do Paraíso	14	0.7
Capelinha, Frutal, Itabira, Matias Barbosa, São João Del Rei Vespasiano, Lagoa Santa	13	0.7
Barbacena, Bocaiuva	12	0.6
Carmo do Paranaíba, Janaúba, Ouro Preto	11	0.6
Além Paraíba, Corinto, Januária, Manhuaçu, Pará de Minas, Ponte Nova, São João, Nepomuceno, Serro	10	0.5

There was predominance of sexual violence in the female gender, which accounted for 1706 of the cases (85.4%). Furthermore, 1408 cases (70.5%) were reported in individuals under 19 years old of both genders; within this age group, there was a higher prevalence among those aged from 10 to 14 years old (21.5%) and from 0 to 4 years old (17.3%). In 301 cases (15.1%), the subjects had

incomplete schooling from 5th to 8th grade; and in 1853 cases (92.8%), they were residents in urban areas. A total of 858 victims of sexual violence (43.0%) were single, and marital status did not apply in 39.1% of the cases due to the age of the victim (Table 2). Suspected alcohol use by the offender was reported in 21.7% of the cases, whereas 37.3% of offenders did not use alcohol. However, there were missing and unknown data for this aspect in 41% of the notifications.

Table 2 – Sociodemographic profile of people who suffered sexual violence. Minas Gerais, Brazil, 2016. (n=1996)

Variable	n	%
Gender		
Female	1706	85.4
Male	290	14.6
Age group (in years old)		
0 to 4 years old	345	17.3
5 to 9 years old	336	16.8
10 to 14 years old	430	21.5
15 to 19 years old	297	14.9
20 to 29 years old	268	13.4
30 to 39 years old	152	7.6
40 to 49 years old	96	4.8
50 to 59 years old	48	2.4
60 to 69 years old	18	0.9
70 to 79 years old	4	0.2
≥ 80	2	0.1
Race		
Caucasian	549	27.5
Brown-skinned	762	38.2
Black	238	12.0
Asian	16	0.8
Indigenous	5	0.2
Unknown	426	21.3
Schooling		
Illiterate	5	0.3
Incomplete 1st to 4th grade of elementary school	151	7.6
Complete 4th grade of elementary school	63	3.1
Incomplete 5th to 8th grade of elementary school	301	15.1
Complete elementary school	69	3.5
Incomplete high school	108	5.4
Complete high school	99	5.0
Incomplete higher education	59	3.0
Complete higher education	36	1.8
Does not apply	500	25.0
Unknown	605	30.2

Table 2 – Cont.

Variable	n	%
Place of occurrence		
Residence	999	50.5
Public road	292	14.6
Others	372	18.2
Unknown	333	16.7
Marital status		
Single	858	43.0
Does not apply	781	39.1
Married/Consensual union	143	7.1
Separated	59	3.0
Widow/Widower	13	0.6
Unknown	142	7.2

There was rape in 1267 cases (63.5%), use of physical violence in 671 cases (33.6%) and psychological violence in 768 cases (38.5%). Prophylaxis for sexually transmitted diseases was performed in 602 cases (30.2%), for the prevention of infection by the Human Immunodeficiency Virus (HIV) in 553 cases (27.7%), for hepatitis B in 417 cases (20.9%), and for emergency contraception in 371 cases (18.6%).Procedures such as blood and semen collection were rarely performed (17.9% and 6.3% of the cases, respectively) (Table 3).

Table 3 – Distribution of cases of sexual violence according to the types of aggression and the conduct of health facilities in the care of people in situations of violence. State of Minas Gerais, Brazil, 2016. (n=1996)

Variable	n	%
Physical violence occurred		
No	1088	54.5
Yes	671	33.6
Unknown	237	11.9
Psychological violence occurred		
No	961	48.1
Yes	768	38.5
Unknown	267	13.4
Corporal strength/beating aggression		
No	884	44.3
Yes	728	36.5
Unknown	384	19.2
Threatening aggression		
No	1085	54.4
Yes	526	26.3
Unknown	385	19.3
Sexual harassment aggression		

Table 3 – Cont.

Variable	n	%
No	995	49.8
Yes	607	30.4
Unknown	388	19.4
Does not apply	6	0.3
Rape		
No	401	20.0
Yes	1267	63.5
Unknown	322	16.2
Does not apply	6	0.3
Sexually transmitted disease prophylaxis		
No	914	45.8
Yes	602	30.2
Unknown	473	23.7
Does not apply	7	0.3
HIV prophylaxis		
No	954	47.8
Yes	553	27.7
Unknown	481	24.1
Does not apply	8	0.4
Hepatitis B prophylaxis		
No	1069	53.5
Unknown/Blank	502	25.2
Yes	417	20.9
Does not apply	8	0.4
Blood collection procedure		
No	776	38.8
Yes	358	17.9
Unknown	854	42.7
Does not apply	8	0.4
Semen collection procedure		
No	1313	65.8
Yes	125	6.3
Unknown	550	27.5
Does not apply	8	0.4
Emergency contraception procedure		
No	890	44.6
Yes	371	18.6
Unknown	437	21.9
Does not apply	298	14.9

In 576 cases (28.9%), people had suffered sexual violence more than once. As for the relationship between victim and offender, 25.7% of the victims were attacked by a stranger offender, 23.9% by a friend/acquaintance, 14.3% by their father or stepfather, and 3.3% by their boyfriend (Table 4).

Table 4 – Distribution of cases of sexual violence according to the relationship between the person in situation of violence and the offender and the number of times that the individual suffered violence. State of Minas Gerais, Brazil, 2016. (n=1996)

Variable		n	%
Violence occurred more than once	No	889	44.5
	Yes	576	28.9
	Unknown/Blank	531	26.6
Relationship between victim and offender	Stranger	513	25.7
	Friend/Acquaintance	478	23.9
	Unknown	307	15.3
	Father	154	7.7
	Stepfather	133	6.6
	Spouse	67	3.3
	Boyfriend	67	3.3
	Ex-spouse	39	1.9
	Ex-boyfriend	34	1.7
	Brother	32	1.6
	Institution	28	1.4
	Mother	16	0.8
	Caregiver	13	0.6
	Self	9	0.5
	Son	4	0.2
	Boss	4	0.2
	Police officer/Law officer	4	0.2

Figure 1 shows the association between the sociodemographic and exposure variables among people in situations of sexual violence in a factorial plan.

At the center, it is possible to see that the average profile of the victims is female, white and brown-skinned in the 10-14 year old age group, who live in municipalities with up to 100,000 and more than 1 million inhabitants, where violence occurred at the residence and more than once.

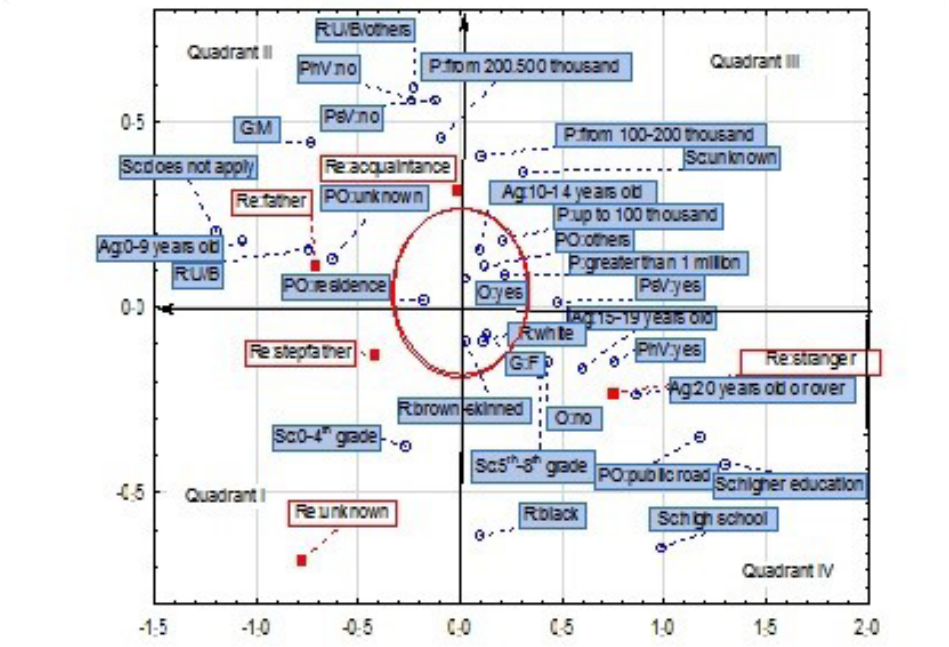
Quadrant I showed that offender/stepfather and offender/unknown was associated with schooling from 0 to 4th grade and with brown-skinned ethnicity.

Quadrant II showed that offender/father and offender/acquaintance was associated with the residence or an unknown location as place of occurrence, violence in male children aged from 0 to 9 years old, in municipalities of 200 to 500 thousand inhabitants, who did not suffer physical or psychological violence.

Quadrant III showed that municipalities with up to 100 thousand inhabitants, from 100 to 200 thousand and more than 1 million inhabitants (Belo Horizonte) were grouped together with people who suffered violence between the ages of 10 and 14 years old, with unknown schooling, where the

act of sexual violence occurred more than once, the place of occurrence registered as “others” and sexual violence concomitant with psychological violence.

Quadrant IV showed that the stranger offender was associated with white women aged 15 years old or over, schooling from the 5th grade to higher education, where the act of sexual violence was unique and concomitant with physical violence, occurring on public roads.



Caption:
Multiple Correspondence Factor Analysis of the variables below:
Active variables:
(Ag) – Age group: 0 to 9 years old; 10 to 14 years old; 15 to 19 years old; 20 years old or over.
(G) – Gender: F (female), M (male).
(R) – Race: white, brown-skinned, black, U/B/others (unknown, blank and others).
(Sc) – Schooling: 0 to 4th grade, 5th to 8th grade, high school, higher education.
(P) – Population of the municipality: up to 100 thousand, from 100 to 200 thousand, from 200 to 500 thousand, from 500 to 1 million, greater than 1 million.
(PO) - Place of occurrence: residence, public road, others, unknown.
(O) – Occurred more than once: yes, no, U/B (unknown, blank).
(PhV) - Physical violence: yes, no.
(PsV) - Psychological violence: yes, no.
Supplementary Variable:
(Re): Relationship between the victim of sexual violence and the offender: father, stepfather, acquaintance, stranger, unknown.

Figure 1 – Association between the sociodemographic and exposure variables among people who have suffered sexual violence. Minas Gerais, Brazil, 2016

DISCUSSION

In this study, it was observed that people in situation of sexual violence were mainly children and young people up to 29 years old and female, and the age groups from 0 to 9 years old and from 10 to 19 years old accounted for 34.1% and 36.4% of the cases, respectively. In Kenya, Abuya et al.[19] reported that 45% of sexual violence occurs among women aged from 15 to 29 years old. Similar data (32.4% and 49.5%) were found for the same age groups[18], that is, 32.4% and 49.5%.

In a study carried out in Rio de Janeiro,[12] an analysis of the profile of the victims of sexual violence from the records of the social work service of a maternity hospital between 2005 and 2009 also showed predominance of females (93.4%), children up to 12 years old (26%), adolescents from 13 to 18 years old (34%), and young people from 19 to 24 years old (20%). Additionally, in a reference

hospital for sexual violence[2] it was observed that 47.4% of the victims were aged between 12 and 18 years old. It was reported a higher frequency in children younger than 1 year old (6.7%) and from 1 to 9 years old (41.7%).[20]

In the United States, 1 in 3 women has already suffered some sort of sexual violence, and 1 in 5 women has experienced rape or attempted rape. Of these, 41.3% suffered the first act of sexual violence at the age of 17 or younger, and 47% were victims of rape or attempted rape by their current or former intimate partner.[21]

The higher incidence in males (63%) was reported when compared to incidence in the female gender, with 53.3% lived in institutions and 60% of the children and adolescents being in situations of violence when when they were living in public institutions, under the responsibility of the State.

It is well known that, in a universal context, children and adolescents are populations vulnerable to sexual aggression. According to a U.S. Justice Department survey, there are more than 230,000 victims of sexual assault and rape each year, adolescents between the ages of 12 and 17 years old represent 1 in 5 reports of sexual aggression, and those aged from 16 to 19 are four times more likely than any other group to be exposed to this type of injury. Fifty percent of all the people who have been raped are under the age of 18 and 16% are under the age of 12.[23] Studies conducted in different parts of the world suggest that between 7% and 36% of girls and between 3% and 29% of boys have already suffered childhood sexual abuse.[7]

Children and adolescents were harassed by various forms of violence, with the use of corporal strength, verbal threat and weapons, resulting in the occurrence of several body injuries, with approximately 35% of the children being hospitalized and 15% evolving to death.[24]

Known risk factors in this population include being female, being unaccompanied by an adult, poverty, physical or cognitive disabilities, and previous occurrence of sexual violence. Imprisonment and having a father with mental illness or drug or alcohol dependence also lead to an increased risk of violence. Moreover, risk behaviors include interaction with strangers through the Internet or social media and use of drugs or alcohol.[23]

In this study, physical violence concomitant with sexual violence was more frequent in males. Men are less likely to report the situation of sexual violence and, therefore, information on the extent of sexual violence against men is especially limited, and it is very difficult to establish actual incidence or prevalence rates,[7] but it is believed that, in the U.S., 1 in 6 men has already experienced some form of sexual violence during their lifetime, and approximately 1.5% of men were victims of raped or attempted rate at some point in their lives.[21]

As for the place of occurrence, the percentage of people who were assaulted at their residences ranged from 54%, and 63.7%.[9,18,20] Where as in the age group of 10 to 14 years old, this percentage was 76.8%.[9] The present study found that 50.5% of cases of sexual violence occurred at home, considering all age groups, at that this type of violence is most frequently perpetrated by relatives and acquaintances (58.9%), with fathers and stepfathers accounting for 17.3% of the offenders. This situation was also observed in the factorial plan (Quadrants I and II).

It is worth highlighting that 100% of child offenders were their acquaintances, and that children's stepfathers were 5 times more likely to perpetrate sexual violence compared to their biological fathers.[13] In most cases of sexual violence against children and adolescents, victims of violence and offenders are not strangers, since 3 out of 4 victims report knowing the offender.[23]Although younger children and adolescents are more prone to episodes of sexual violence by a family member, older adolescents are more likely to be exposed to violence by an acquaintance during a social gathering and involving the use of drugs or alcohol. And the contribution of drugs and alcohol to the occurrence of sexual violence in the adolescent population has been increasingly recognized in recent years: the

consumption of these substances immediately prior to the sexual assault was reported by over 50% of those who suffered violence when they were 12 years old or over.

According to the WHO, alcohol has been used to facilitate non-consensual sex,[7] and women who use alcohol are 18.3% more likely to suffer sexual violence and seven times more likely in cases in which the partner had used the substance.[9] In the present study, 21.7% of the perpetrators of sexual violence were suspected of drinking alcohol, a result similar to that of a previous study[25] showing that 26% of domestic and sexual aggressions are associated with alcohol use.

There was a higher incidence of sexual violence in brown-skinned people (38.2%). Similarly, two previous studies showed a predominance of brown-skinned women, who accounted for 51.3%[25] and 55.4%[26] of their samples, respectively, unlike other study that found a prevalence of 81.8% of white women in a study carried out in the state of Santa Catarina, Brazil. This difference can be attributed to the greater predominance of the white ethnicity in this state.

Little schooling was associated with a higher risk of sexual violence. Women with an educational level higher than elementary education were 26% less likely to be assaulted than those who completed only elementary education.[19]Other research reported that 42.4% of people who suffered sexual violence had less than 8 years of schooling, and 40.8% of them had more than 9 years of schooling. In the present study, victims who had incomplete elementary education stood out (25.8%). This fact was also observed in the factorial plan because of the proximity of this variable to the average profile. However, it is necessary to consider that there was 30.2% of unknown/blank data for schooling, in addition to the fact that most of the cases occurred in the age group under 14 years old.

When examining the factorial plan, it is observed that sexual violence that occurred on public roads is not repeated, is related to the age groups of 15 years old or over, and was perpetrated by a stranger offender who made use of physical violence (Quadrant IV). This may be due to the fact that adolescent girls and young women often leave their homes alone and have a more active social life.[23] In this age group there were more rapes and physical assaults.

By analyzing in this study the marital status of people who suffered sexual violence, it was observed that they were predominantly single (43%), supporting the information found in studies carried out at the Women's Hospital in Campinas, state of São Paulo, Brazil, and at a reference center for the care of victims of sexual violence in Teresina, state of Piauí, Brazil, which found that 76.1%[2] and 77.6%,[27] respectively, of these victims were single.

A research[28] with African-American and African Caribean women in Baltimore, MA, and in the U.S. Virgin Islands reported 18% of cases of emotional abuse; additionally, 50% of women reported physical abuse and 32% suffered physical and sexual abuse from an intimate partner. A study conducted in Utah[29] observed that the incidence of emotional, physical, and sexual violence was 11%, 28% and 21%, respectively. In the present study, sexual violence by the partner (spouse, ex-spouse, boyfriend, ex-boyfriend) was reported in 10.2% of the notifications, which was below the percentage found in the literature. However, considering all types of offenders, there was sexual violence combined with physical violence, psychological violence, beating, and threatening in 33.6%, 38.5%, 36.5%, and 26.3% of the cases, respectively. This relationship was also observed in the factorial plan, since Quadrants III and IV reveal that psychological violence predominates in the age group of 10 to 14 years old, and physical violence in the age group of 15 years old or over. However, it should be highlighted that these indicators may be underreported in the state of Minas Gerais.

Although most cases of sexual aggression are not reported, the best available data suggest that the lifetime prevalence of sexual violence in the United States is approximately 20% among adult women.[30] In Brazil, a rape happens every 10 minutes. Of those crimes, 88.5% are perpetrated against women[31] and, according to a Brazilian inquiry, 11.8% of women reported having suffered

sexual violence by their intimate partner, and 10% suffered at least one episode of sexual violence during their lifetime.[17]

Thus, sexual violence is complex and must be analyzed considering the socioeconomic, political and cultural contexts in which it is present, also stressing that this type of violence occurs worldwide in various cultures and affects people throughout society.[32] Furthermore, considering the factorial plan, it is noteworthy that sexual violence has the same characteristics regardless of the number of inhabitants of the municipalities (Quadrant III).

One of the limitations of the present study was the fact that the data analyzed came from people who suffered violence and who sought a health unit; therefore, study analysis did not include the cases of victims who only sought police aid or resorted to private hospitals/clinics, which culturally notify less. In addition, the report forms did not provide information on people's income, which prevented to measure the direct relationship between income and sexual violence. Moreover, although Health Information Systems (HIS) are official sources of records of diseases and injuries, they need to be optimized for coverage, since the minority of cases of rape is reported in Brazil, and the percentage of victims who report the crime at the police station is even lower.

The quality of information from the HISs' databases is essential for decision-making in science, since it generates epidemiological indicators that reflect population health or injuries; however, the quality of this information is often unreliable, since data completeness should be improved.[33] SINAN's notification forms present a significant amount of variables, but not all are mandatory when they are to be entered into the information system, which allows them to be left blank even if they valuable for the calculation of health indicators, thus masking the information contained in these databases.[34]

Given the magnitude of sexual violence, it is expected that the data found here contribute to the development of new research and to the expansion of public policies, making it possible to outline strategies to avoid sexual violence. It is expected that the study can provide interventions in the care network to people in situations of violence and that it can contribute to improve information on the topic, encouraging reports in the health and legal fields and leading to a better understanding of this complex phenomenon.

Sexual violence requires special attention from researchers, government officials, health professionals, and society as a whole to bring changes to this deplorable reality. Health services must optimize the actions that involve the process of identification and notification of cases of sexual violence and the articulation with the network of care and protection to the victims of this type of violence.

It should be highlighted that health authorities should audit reference services that provide prophylaxis for acute cases of sexual violence because of the low registration of this information in the notifications. Prophylaxis can prevent a person from becoming contaminated with sexually transmitted infections and from having an unwanted pregnancy. The contact with the health service should first provide care and prophylaxis, but it must be a place that guarantees clarification regarding the expanded network of protection and defense of rights, especially to children and adolescents who must have their care guaranteed also by the Guardianship Council, called by the health care professional.

Nurses must be qualified to care for people who have suffered sexual violence, since they are the professionals who are closest to the client, lacking a close look at the signs and symptoms and a qualified listening, guaranteeing quality notification. With plenty of knowledge, the nursing team improves care through ethical and welcoming actions, guaranteeing comprehensive and humanized care, in addition to contributing to the organization of the qualified care network and to the nursing diagnosis, considering the particularities of the people and each age group served.

CONCLUSION

It is necessary to promote optimization of the care network to people in situation of violence, especially against women and children. A relationship was found between sexual violence of children and adolescents being abused in their own residences by known offenders who make use of the psychological violence. Authorities should invest in preventing domestic violence perpetrated against this population.

The adult individuals who experienced violence are sexually assaulted on public roads by stranger offenders who use physical violence, occurring mainly in a single episode. Thus, it is perceived that improvements in the area of public safety should be fostered in order to curb this form of violence especially against women, with adequate training for welcome, health care and notification.

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NOTES

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CONTRIBUTION OF AUTHORITY

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CONFLICT OF INTERESTS

There is no conflict of interest.

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