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Sexual violence and its association with health self-perception among pregnant women

ABSTRACT

OBJECTIVE: To estimate the prevalence of sexual violence history among pregnant women and its association with the self-perception of health status.

METHODS: Cross-sectional study including a total of 179 pregnant women older than 14 years old at gestation week 14 to 28 attending public health services in the city of São Paulo, Southeastern Brazil, between 2006 and 2007. Data collection instruments included: questionnaire on sexual violence; questionnaire on sociodemographic data; and an assessment of health-related quality of life using the Medical Outcomes Study 12-Item Short-Form Health Survey (SF-12®). Age, skin color, education, occupational and marital status, and self-perception of physical and mental health were compared between women with and without a lifetime history of sexual violence. Sexual violence was categorized as penetrative and non-penetrative sex.

RESULTS: Among all women interviewed, the prevalence of sexual violence was 39.1%, of which 20% were of penetrative type by known perpetrators. In 57% of cases, the first episode of violence was before the age of 14. There were no sociodemographic differences between women with and without history of sexual violence. Mean scores of self-perception of physical health among women with history of sexual violence were lower (42.2; SD= 8.3) compared to those without history of sexual violence (51.0; SD= 7.5) ($p<0.001$). Mean scores of self-perception of mental health were 37.4 (SD= 11.2) and 48.1 (SD= 10.2) ($p<0.001$), respectively.

CONCLUSIONS: There was found high prevalence of sexual violence among pregnant women studied. Women with history of sexual violence showed poorer self-perception of health status compared to those without history of sexual violence.

DESCRIPTORS: Pregnant Women, psychology. Battered Women. Perception. Sexual Violence. Violence Against Women. Quality of Life. Socioeconomic Factors. Cross-Sectional Studies.

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INTRODUCTION

Any sexual violence in lifetime causes a physical and mental impact on health that can lead to increased need of care. In addition, health consequences seem to be proportional to the severity of the violence suffered.^{12,13}

Sexually abused children tend to be shy, and show low self-esteem, alcohol abuse, and revictimization during adult life.²¹ Other psychosocial problems associated to child abuse such as recurrent depression, borderline personality and interpersonal relationship disorders, and suicidal tendencies can also occur.^{12,15,21}

Besides an emotional impairment, many authors have associated sexual violence against women to higher rates of somatic complaints such as gastrointestinal disturbances, dyspareunia, dysmenorrhea, chronic pelvic pain, irregular menstrual periods, and other chronic pain conditions.^{6,7,9,11}

Considering that one's health consists of his/her physical, mental, and social well-being, health-related quality of life of sexually abused women is likely lower than that of women with no history of sexual abuse.⁵

In view of the fact that abuse is often suppressed, an active search of a history of sexual violence during routine health care can provide an estimate of the actual cases of abuse and help health team minimizing the physical and mental health consequences arising from this traumatic experience.

The objective of the present study was to estimate the prevalence of sexual violence among pregnant women and its association with their self-perception of health status.

METHODS

Comparative and descriptive cross-sectional study conducted among pregnant women attending a low-risk prenatal care clinic at a university and a maternity hospital for low-income population in the city of São Paulo, Brazil, between 2006 and 2007.

The sample size was estimated based on 11.5% prevalence of sexual abuse (95% CI: 8.0;14.9) reported by Schraiber et al¹⁶ (2002) among childbearing-age women in a public service in the city of São Paulo. The minimum sample size estimated was 142 pregnant women. To cover for potential losses a 25% was added resulting in an estimated sample size of 177 women.

Inclusion criteria were: being pregnant over 14 years of age; and pregnancy between week 14 and 28 confirmed based on the last menstrual period date or ultrasound performed in the first 20 weeks of gestation.

All women who were interviewed were in the second trimester of pregnancy so that to ensure that the sample studied would be homogeneous and because this seems to be the period of pregnancy when women have less discomfort and fewer complaints like vomiting, which is more common during early pregnancy, and lower back pain, which is more usually seen in late pregnancy.¹⁹

Women were included in the study following the order of arrival at the respective clinics.

Exclusion criteria were: reported illiteracy regardless of the level of schooling; disabling diseases that could interfere with their understanding and questionnaire completion; and medical-surgical and obstetric conditions causing major discomfort.

Of a total of 180 women who were invited, only one refused to participate in the study.

Data was collected individually in a private room before a routine prenatal care visit. All interviews were carried out by the same investigator who was an obstetrician/gynecologist doctor of the multidisciplinary team at a reference women center specialized in approaching sexual violence victims.

Questions for identifying sexual violence were based on items as described by Fleming⁸ (1997) and modified by Wyatt²² (1985). Following the US Centers for Disease Control and Prevention (CDC) definition of sexual violence² and based on the answers provided, sexual violence was characterized as unwanted (penetrative or not) sexual contact committed against someone who is not capable of either consenting to, or refusing it.

Sexual contact was defined as an attempted or actual contact between penis and vulva or penis and anus involving any degree of penetration; penetration of anal or genital opening using a hand, finger or any other object; contact between mouth and penis, vulva or anus; direct or indirect (through clothes) intentional touch of genitals, anus, groin, breasts, internal thigh or buttocks; or acts with no physical contact but of a sexual nature such as voyeurism and exposure to pornography.² Sexual abuse was not characterized as both genital penetration and non-penetration since non-penetrative experiences have similar health consequences.^{7,8,14}

The limit age of childhood varies in different societies. We set the limit at 14 years old because at this age in Brazil even a consented sexual act is presumably a rape and/or indecent assault. It was considered sexual abuse during childhood when it was experienced before the age of 14 and during adult life when it was experienced after the age of 14.

The Medical Outcomes Study 12-Item Short-Form Health Survey® (SF-12) was applied to assess women's self-perception of their health status. The SF-12 is a short version of SF-36 that was previously translated into Brazilian Portuguese and validated in Brazil.^{4,20} The questionnaire consists of 12 objective questions on physical and mental functioning. The higher the score, the better one's health-related quality of life.

Categorical variables were expressed by numbers and percents and the associations between these variables were assessed using the chi-square test or Fisher's exact test. Quantitative variables were described as means and standard deviations (SD) and their differences were analyzed using Student's t-test. The strength of association between quantitative variables was estimated using Pearson's correlation coefficient.

A linear regression analysis or analysis of variance (ANOVA) (conditional on the explanatory variables to be included in the model) was carried out to jointly assess variables affecting physical and mental score. For this analysis there were selected variables with $p < 0.20$. A 5% significance level was set for all analyses ($\alpha = 0.05$).

The study was approved by the Research Ethics Committee of Universidade Federal de São Paulo. All subjects were informed on the nature of the study and their privacy and confidentiality was assured. They all signed a free informed consent form. Women with history of sexual violence were assured medical and mental care as needed.

RESULTS

Of 179 subjects, mean age was 24 years old (SD= 5 years old) ranging between 15 and 38. The majority was younger than 23 (51.3%). Mixed (41.4%) and white (40.8%) skin color were more common, followed by black (14.5%), Indian (2.2%), and Asian (1.1%). Most women had a steady partner (69.8%) and did not have an occupation (78.8%). Mean schooling was 8.9 years (SD= 2.7 years). More than half of the women studied (58.1%) had had one or more prior pregnancies.

Seventy out of 179 women studied had a past history of sexual violence (3.1%, 95% CI: 31.9;46.7), of which 56 (31.3%, 95% CI: 24.6;38.6) suffered non-penetrative and 14 (7.8%, 95% CI: 4.3;12.8) penetrative sexual violence.

Most (57%) women were younger than 14 when they were first abused. Also, 25.7% were repeatedly abused by the same perpetrator.

Recurrence of abuse was seen in 22.9% of women who were abused at a different point of their lifetime or by a different perpetrator.

There was no statistically significant difference between women with and without history of sexual violence according to occupation, schooling, marital status, and skin color ($p > 0.05$) (Table).

Perpetrators were generally familiar to the victims (88%). For those abused during childhood, perpetrators were more often family acquaintances (43.5%) and family members (41.3%) while for those abused during adult life, they were family members (25%), partners (22.5%), and family acquaintances (20%).

Only one woman who experienced sexual violence during adult life sought care at a specialized service and formally reported it. Three women became pregnant as a result of a sexual assault, and one of them was currently pregnant during the interview. There was no report of sexual abuse during the current pregnancy.

Self-perception of physical and mental health among women studied showed a mean score of 47.6 (SD= 8.9) and 43.6 (SD= 11.8), respectively.

There was no difference in health scores according to demographic characteristics.

Sexual violence victims showed significantly lower mean physical (42.2; SD= 5.3) and mental (37.4; SD= 11.2) scores than women with no history of sexual violence (51.0; SD= 7.5 and 48.1; SD= 10.2, respectively; $p < 0.001$).

Gestational age, occupation, marital status, acceptance of current pregnancy and schooling – all of them variables that could affect physical and/or mental health scores – were not associated to self-perception of health status.

DISCUSSION

We found high prevalence of lifetime sexual violence (39.1%) among pregnant women attending the health care services studied. Non-penetrative and penetrative sexual violence was seen in 31.3% and 7.8% of women, respectively. Sexual violence victims perceived their own physical and mental health as poorer compared to those with no history of sexual violence.

Sexual violence against women is a public safety concern and can negatively affect their health. Victims of this type of violence are women of all ages and socioeconomic conditions and perpetrators can be their partners or strangers. Their children may also become victims of this violence. As a result, many women conceal what happened to them from other people and from themselves.

In our study, we tried to evoke these memories by inquiring these women in a private setting suitable for

Table. Sociodemographic characteristics of subjects according to history of sexual violence. São Paulo, Southeastern Brazil, 2007. (N= 179)

Variable	Sexual violence				p-value
	Yes (n=70)	%	No (n=109)	%	
Occupation					0.958 ^a
Yes	15	21.4	23	21.1	
No	55	78.6	86	78.9	
Schooling (years)	8.6 (DP=2.9)		9.1 (DP=2.5)		0.185 ^b
Marital status					0.103 ^a
Living with a partner	44	62.9	81	74.3	
No partner	26	37.1	28	25.7	
Skin color					0.725 ^c
White	31	44.3	42	38.5	
Black	11	15.7	15	13.8	
Mixed	26	37.1	48	44.0	
Indian	2	2.9	2	1.8	
Asian	-		2	1.8	

^aChi-square test^bStudent's t-test^cFisher's exact test este Exato de Fisher

listening. Sexual violence victims as well as victims of other stressing events incompletely or completely repress these unbearable memories. Yet they can rekindle them under certain circumstances such as during pregnancy.^{3,10,17} Bearing in mind that long “forgotten” sexual violence experiences can be relived during pregnancy, we find it appropriate to recommend exploring them during prenatal care.

The subjects of the present study were characteristically from socioeconomically disprivileged strata showing low schooling (8.9 years) and unplanned pregnancies (only 25% had planned pregnancies).

The study evidenced that sexual violence (39.1%) is significantly prevalent in the life of the women studied. However, it might be that some of them did not disclose their experiences out of fear or shame despite the fact that their privacy and confidentiality were assured and they were in a reassuring environment.

Other authors have also reported high prevalences of sexual violence, i.e., 39% to 46%⁹ and 37%.³ However, lower prevalences were reported by Schraiber et al¹⁶ (2002) (11.5%) and Stenson et al¹⁷ (2003) (8%). These latter authors pointed out that the study instrument and a more strict definition of sexual violence may have led to underestimation.¹⁷

The study instrument used for identifying sexual violence can explain wide-ranging prevalences found in different studies. Our findings in the present study may be attributed to a wide definition of sexual abuse or even to the fact that abuse was considered when

victims perceived it as so. They could also be explained by the role of pregnancy in bringing back repressed painful memories.

Pregnant women go through a process of regression characterized not only by early life behaviors and feelings but also by a return to a specific period of psychosexual development that remained unconscious.¹⁹

Besides reliving a past history with recovery of prior emotional disorders, pregnancy is an experience intrinsically related to sexuality and gender relationship and can also involve the resolution of remote conflicts of dependence and power.

Child sexual abuse usually occurs within the family environment as it primarily relies on the perpetrator's power relationship. High rates of child abuse seen in the sample studied (57.4% of the victims) corroborates the assumption that children are more vulnerable to this violence and because they are affectively and socioeconomically dependent, they can more easily silent about happened to them.

Family and providers involved with the child need to be prepared to approach this issue as uninformed parents, educators, and health providers can do little to help a child victim of sexual violence.

Our study confirmed that recurrence of abuse is common (22.9%). Stenson et al¹⁷ (2003) found that 13% of women who were victims of sexual violence in adult life had been abused during childhood. Dickinson et al⁵ (2007) found 55% of recurrence.

We found out that perpetrators were usually familiar to the victim, which corroborates other studies,^{1,3,8,13,17} and challenges the assumption that sexual abuse is committed by strangers or someone outside the family.

Only one woman who experienced abuse formally reported it, revealing serious underreporting of sexual abuse. This could be explained by the victim's embarrassment or even resignation since abuse within the family is very common. In addition, when the perpetrator is the one who supports the family, not only children but also adult women are often reluctant to report it.

Tadjem & Thoennes¹⁸ (1998) showed that only 36% of sexual violence victims in the United States sought medical care. There are scarce data in Brazil but it is believed that less than 10% of sexual violence victims seek specialized police stations to report being abused. These victims fear not only a confrontation with the perpetrator but also interrogation and forensic examination.

No associations were found between sociodemographic characteristics and rates of sexual violence, which suggest that it pervasively occurs making it more difficult its prediction.

The impact of sexual violence varies but it depends on how a victim will process this experience and how much emotional support she will get together with the effect of other personal and environmental factors. Most studies have reported an actual health impact or an effect on health perception in the long run among abused women.^{3,7,9,13,17}

In our study evidenced lower self-perception of physical and mental health status of pregnant women with history of sexual violence were lower if compared to those with no history of abuse. It is often manifested as nonspecific complaints and symptoms of difficult diagnosis mainly because victims may omit the abuse experience as they do not recognize it as a stressor.

Because the study subjects were exclusively selected from a public health service users the results cannot be generalized to women with different socioeconomic conditions.

In the light of sexual violence and negative impact on quality of life reported among pregnant women in our study, we recommend practical actions such as the inclusion of a sexual questionnaire that may help the etiological diagnosis of chronic complaints in any population group.

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