Original Article

Prevalence of Spouse Abuse, and Evaluation of Mental Health Status in Female Victims of Spousal Violence in Tehran

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(Received: 25 September 2008 ; Accepted: 12 March 2009)

Objective: Spouse abuse is a worldwide health concern with prevalent psychiatric and medical consequences in victims. The present study was conducted to determine the prevalence of spouse abuse among a group of women living in Tehran and survey their mental health status.

Methods: Totally, 1186 married women were selected through a randomized systematic sampling from 22 districts of Tehran. Initial data were obtained by demographic questionnaire, Spouse Abuse Questionnaire (SAQ) and General Health Questionnaire - 28 (GHQ-28). Data were analyzed using Student's unpaired t-test or χ^2 test, when appropriate.

Results: Of 1186 women, 980 (82.6%) were physically and sexually abused, however, 818 (68.9%) were physically and emotionally and 835 (70.5%) were sexually and emotionally abused by their husbands. Spouse abused women, especially emotionally and physically abused clients had higher GHQ-28 scores in all the components of the test while their differences with non-abused women were statistically significant. This is interpreted as poor mental health status among these victims.

Conclusion: Our results revealed the high prevalence of maltreatment against women living in Tehran. Meanwhile, our victims were more commonly suffered from anxiety and depressive disorders and achieved poor mental health status and low social performance.

Iranian Journal of Psychiatry and Behavioral Sciences (IJPBS), Volume 3, Number 1, Spring and Summer 2009: 50-56 .

Keywords: Anxiety • Depression • Spousal Violence • Women

Introduction

Spouse abuse is a major worldwide health concern and includes a wide range of physical, sexual, and emotional (psychological) maltreatments used by one person in an intimate relationship against another (1). Spouse maltreatment is a prevalent problem in both developed and undeveloped countries. In a survey in the United States, more than one in three women presented to emergency departments because of spousal violence (2). Prevalence of spouse abuse has been reported as high as 41% in London (3). Kramer et al studied 1268 women referred to emergency departments and primary care clinics in Spain, among whom 50-75% were physically and emotionally abused, while 26% had experienced sexual abuse (4). Spousal maltreatment was also common in London with a prevalence rate of 39-60% (5). According to worldwide studies, spousal violence is more frequent in developing countries (6,7). In Chile, Nicaragua, Russia, India, Taiwan, and Turkey-countries with different cultural background-, violence against women is a serious health concern (1,6,8-11).

Statistical evidence on the actual prevalence of spousal violence against women in Iran is scant. The few unofficial available studies indicate that spousal violence against Iranian women is high, ranging from 55% in university students to 66.3% in general population (12).

Prior studies have demonstrated prevalent psychiatric and medical consequences in female victims of spousal violence (13). Meanwhile, most of the sufferers have experienced physical

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complications including: head trauma, chronic pain, vaginal bleeding, abortion, gastrointestinal diseases, etc. (4,14,15). On the other hand, psychiatric consequences are quite common among these victims (4,13,16-19). In addition, prior investigators have uniformly convinced that depression is a frequent consequence of domestic violence against women (20,21), however, anxiety disorders, especially post-traumatic stress disorder (PTSD) (22,23), committing suicide (4,23,24), and drug addiction (4,25) are also common among women with history of intimate partner violence. Other studies have reported battered women syndrome among female victims of spousal violence (26,27). Bradley et al, and Walker et al have referred to depression, anxiety, problem in interpersonal relationship, and low self-esteem as clinical criteria of battered women syndrome (23,28).

The purpose of this study was to assess the prevalence of spouse abuse and mental health state of female victims of spousal abuse. Based on the results of the study, it is possible to develop more effective, preventive, and interventional programmes.

Materials and Methods

For this cross-sectional study, all the 22 districts of Tehran (Capital of Iran) were included. 1300 married women were selected through a randomized systematic sampling using the data bank of Jihad Daneshgahi of Tehran, which is based on the call numbers of the residents of Tehran. However, refusal rate was 114 (8.7 %) and totally, from 1300 individuals which were selected as the study sample, 1186 (91.2%) participated in the study. It should be noted that the research assistants presented the questionnaires to each participant personally. Initial data were obtained by demographic questionnaire, SAQ (Spouse Abuse Questionnaire) and GHQ-28 (General Health Questionnaire-28).

Demographic questionnaire elicited information on factors that may be related to spousal violence including age, profession, level of education, duration of marriage, and history of drug addiction of both couples, when appropriate.

SAQ is a self-report questionnaire that was specifically developed based on diagnostic criteria of maltreatments against spouse and assesses physical, sexual, and emotional maltreatments. In case of repeated maltreatment experience, the subject will be considered as the victim of spousal violence. Validity and reliability of this measure had been evaluated and the associated figures was 0.92 and 0.98 ($p<0.001$) respectively (12).

Likewise GHQ-28 is self-report questionnaire that was developed by Goldberg (in 1972. It has four components and assesses physical, anxiety, and depressive symptoms as well social performance (29). The associated reliability coefficient (evaluated by test-retest method), was 0.90. Good validity was consistently demonstrated in more than 60 empirical studies. Total GHQ scores typically correlated with outcome scores from psychiatric structured interviews in the range of $r = 0.65$-0.70 (30). GHQ-28 has also been translated and validated in Iran by the other studies (31,32).

Results are expressed as mean ± standard deviation (SD) for continuous variables, unless otherwise stated. Differences between groups were analyzed using Student's unpaired t-test or χ^2 test, when appropriate. All statistical analyses were achieved using SPSS software (SPSS version 11.5, USA). For all tests, significance was defined as $p<0.05$.

Results

The study population included 1186 married women with the mean age (±SD) of 39.5±11.5 years. Most of the subjects were achieved High school Diploma and were homemaker. Demographic features of the subjects and their husbands are shown in table 1.

Of 1186 women, 980 (82.6%) were both physically and sexually abused, however, 818 (68.9%) were physically and emotionally abused by their husbands. Indeed, most of the subjects had experienced at least two forms of spousal maltreatments.

Tables 2 and 3 compare physically and sexually abused women and their husbands according to the demographic features.

As shown in table 2, level of education differs significantly between sexually and non-sexually abused women ($p<0.001$) as well as between

physically and non-physically abused subjects (p<0.001). In fact, lower educated women had experienced physical maltreatments more commonly than higher educated subjects (p<0.001). Similarly, sexually abused females belonged to the lower educated group (p<0.01). In contrary, there was a non-significant association between level of education and emotional maltreatment (data not shown). Of 1078 housewife women, 346 (32.1%) were physically abused by their husbands; however, 25.9% of employed subjects did suffer from physical violence. The differences in profession of these groups did not reach a statistically significant level. Similar results were found in sexually abused women (table 2).

Lower educated men abused their wives physically and sexually more frequently (p<0.001, p<0.01, respectively), however, level of education did not influence the tendency towards emotional maltreatment (data not shown). Wives of unemployed men were more commonly abused physically (p<0.05) (Table 3), but a non-significant association was found between men's profession and sexual/emotional maltreatment (data not shown).

Table 4 represents the mean (±SD) scores of GHQ-28 questionnaire according to different categories of spouse abuse. It is evident that spouse-abused women have higher scores in all the three categories. This is interpreted as poor mental health status among these victims. The mean score of general health was

Table 1: Frequency Distribution of Demographic Features of 1186 Women and Their Husbands in Tehran

Demographic Features	Frequency (Percent)
Level of education	
Illiterate	130(11)
Primary school	271(22.8)
Primary high school	251(21.2)
Secondary high school	395(33.3)
University education	138(11.6)
Profession	
Homemaker	1078(90.9)
Employed	108(9.1)
Husband's profession	
Unemployed	47(4)
Retired	203(17.1)
Employed	936(78.9)
Husband's level of education	
Illiterate	93(7.8)
Primary school	239(20.2)
Primary high school	256(21.6)
Secondary high school	358(30.2)
University education	240(20.2)

Table 2: Frequency Distribution of Physically and Sexually Abused Women and non-Abused Subjects According to Profession and Level of Education

	Physically Abused		p-value	Sexually Abused		p-value
	Yes n (%)	No n (%)		Yes n (%)	No n (%)	
Level of education						
Illiterate	63(48.5)	67(51.5)		47(36.2)	83(63.8)	
Primary school	94(34.7)	177(65.3)		99(36.5)	172(63.5)	
Primary high School	75(29.9)	176(70.1)	<0.001	84(32.5)	167(67.5)	<0.001
Secondary high school	107(27.1)	288(72.9)		105(26.2)	290(73.8)	
University education	35(25.4)	103(74.6)		25(18.1)	113(81.9)	
Profession						
Homemaker	28(25.9)	80(74.1)	NS	25(23.1)	83(76.9)	NS
Employed	346(32.1)	732(67.9)		335(31.1)	743(68.9)	

NS: not significant

Table 3: Frequency Distribution of Husbands of Physically and Sexually Abused Women and non-Abused Subjects According to Their Husbands' Profession and Level of Education

	Physically Abused		p-value	Sexually Abused		p-value
	Yes n (%)	No n (%)		Yes n (%)	No n (%)	
Level of education						
Illiterate	51(54.8)	42(45.2)		38(40.9)	55(59.1)	
Primary school	83(35.3)	156(64.7)		85(36.2)	154(63.8)	
Primary high School	84(32.8)	172(67.2)	<0.001	79(30.9)	177(69.1)	<0.001
Secondary high school	103(28.9)	255(81.1)		102(28.5)	256(71.5)	
University education	53(22.1)	183(77.9)		56(23.3)	184(76.7)	
Profession						
Employed	280(29.9)	656(70.1)		662(70.7)	274(29.3)	
Unemployed	23(48.9)	24(51.1)	<0.05	27(24.6)	20(57.4)	<0.14
Retired	71(34.9)	132(65.1)		144(70.9)	59(29.1)	

26.3 ± 14.1, 24.2 ± 13.2, and 29.1 ± 14.1 in physically, emotionally, and sexually abused women, respectively. All the differences between abused and non-abused women were statistically significant ($p<0.001$). Additionally, women who had experienced all the three forms of spouse abuse represented poorer mental health status.

Table 4: Mean (± SD) Scores of General Health Status among Abused and non-Abused Women According to the Form of Spouse Abuse.

Forms of spouse abuse		Mean ± SD	P-value
Physical	Yes	26.3±14.1	<0.001
	No	20.8±11.8	
Emotional	Yes	24.2±13.2	<0.001
	No	17.0±10.3	
Sexual	Yes	29.1±14.1	<0.001
	No	20.6±11.7	

Discussion

Spousal violence and maltreatment are relatively frequent in developing countries such as Iran (7,12,33,34). Our results revealed a high prevalence of maltreatment and violence against women in Tehran. We have found that physical (i.e., beating and injuring) and sexual maltreatments (i.e., forced sexual contact, unusual sexual contact, and violent sexual contact) are by far the most common forms of spouse abuse among women living in Tehran. This is in agreement with some other previous studies (14,35-38).

Unlike some other studies, (12,33,39) our subjects were less commonly abused emotionally. This could be explained in part by the women who participated in their studies. They have included relatively higher educated women (nurses and university students), who are supposed to marry higher educated men, thus, spouse abuse could reasonably transfer from physical or sexual forms to emotional. The association between higher education level and emotional abuse was confirmed in previous studies in Iran (12). Although emotional abuse was less commonly reported by our clients (when compared with physical or sexual abuse), it was still frequent among women living in Tehran with a prevalence rate of 70%. This indicates that women living in Tehran experience different forms of maltreatment. The high prevalence of emotional maltreatment implies that general population, especially men, are not aware of emotional maltreatment criteria, i.e., comparing with others, humiliation, ignoring financial and emotional needs, and refusing access to higher education or job. Indeed, Iranian men may consider the aforementioned criteria as their indisputable rights over their wives. This mentality outlines are needed for promoting Iranian men's and women's knowledge and attitude towards the appropriate inter-spousal relationship.

This unpleasant situation of female abuse in Tehran necessitates mental health official and policy makers to promote education-involving methods of confronting violence, appropriate sexual activity and improve women's knowledge and attitude towards maltreatments. Indeed, unclear definition of physical and sexual maltreatment may lead to misinterpretation of maltreatment criteria. For instance, violent sexual contact should be considered as a sexual maltreatment. Thus, further qualitative studies are strongly suggested to draw the spectrum of spouse maltreatments.

We have investigated some demographic variables associated with spousal violence. Like many other studies, we have found that lower educated women are more commonly abused both physically and sexually (12,40). Similarly, husband's level of education was inversely associated with spouse physical and sexual abuse (33,40-44). Meanwhile, unemployed men had more tendencies to become physically and sexually violent, a finding that was also reported by other investigators (12,33,40,42,45-46).

Other demographic factors including women's profession, couples' age, and duration of marriage did not significantly associate with spouse abuse, possibly because of small sample size.

We have surveyed mental health status among female victims of spouse abuse. Numerous studies have demonstrated psychiatric and health-associated consequences in spouse abuse victims (22,47-49).

Our spouse-abused victims showed a higher prevalence of physical and anxiety complications. These findings are in accordance with previous reports (12,14,50,51). Furthermore, like some other studies, (17,20) depression was more common among female victims of spouse abuse.

Unfortunately, these psychiatric consequences may be severe enough to eliminate the victims' daily performance or even oblige them to commit suicide (20-22).

In conclusion, our study showed a high prevalence of maltreatments against a group of Iranian women and demonstrated certain demographic features which were correlated with violence. Meanwhile, the poor mental health status of female victims of spouse abuse necessitates preventive tools to confront violence.

Limitations of the study

1. In this research only types of spousal abuse were studied not the severity of the abuse. Most of the cases suffered from mild forms of abuse in previous studies in Iran (33). Therefore, it is recommended that in the future studies, the severity of the abuse should also be examined.

2. To assess the mental health status of the participants, the GHQ-28 was used. It is recommended that in the future studies, the subjects with high scores on the GHQ-28 should be also evaluated by a psychiatrist.

Significance of the study

In this research the types of spouse abuse, mental health status of the victims and the demographic characteristics of participants were studied in order to achieve more clues to develop more effective, preventive and interventional programmes in the future.

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