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Domestic violence in Iranian infertile women

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Abstract

Background: Millions of men and women suffer from infertility worldwide. In many cultures, infertile women are at risk of social and emotional problems. Infertility may affect the public health in many countries. Domestic violence is the intentional use of physical force, power or threat against oneself, another person or another group or community which leads to injury, death, mental harm, lack of development or deprivation. This study aimed to assess the prevalence of domestic violence against infertile women who referred to the infertility centres of Tehran, Iran in 2011.

Methods: This was cross- sectional descriptive study conducted on 400 infertile women who were selected through convenient sampling method. The questionnaire used in this study included two sections: a demographic section with questions about demographic characteristics of the infertile women and their husbands; and the domestic violence questionnaire with questions about physical, emotional and sexual violence.

Data were analysed by SPSS16; descriptive statistics, Spearman's test, t- test, one-way analysis of variance (ANOVA) and logistic regression were used for data analysis.

Results: Four hundred women with the average age of 30.50 ± 6.16 years participated in the study; of whom, 34.7% experienced domestic violence physical violence (5.3%), emotional violence (74.3%) and sexual violence (47.3%). Domestic violence was significantly associated with unwanted marriage, number of IVFs, drug abuse, emotional status of the women, smoking and addiction or drug abuse of the spouse, mental and physical diseases of the husband ($p< 0.05$).

Conclusion: Many of the current problems in this society, particularly in families are due to the transition of the society from a traditional model to a modern one. The majority of the infertile women experience violence in Iran. Domestic violence against infertile women is a problem that should not be ignored. Clinicians should identify abused women. Providing counseling services to women in infertility treatment centers is suggested to prevent domestic violence against infertile women.

Keywords: Infertile Women, Domestic Violence.

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Introduction

Millions of men and women suffer from infertility worldwide; the estimates of its prevalence vary but are around 15% of all married couples. In Iran, the lifetime prevalence of primary infertility was reported to be 24.9% in 2004 (1). Infertility is defined as the failure to conceive after 12 months of unprotected regular sexual intercourse (2). Experiencing infertility causes aggression, anger, labile economic status, reprimand, divorce, public isolation, losing social status, deprivation, disappointment and violence (3). Furthermore, violence is a global disaster. Usually, women and girls are the prime victims of domestic violence (4). One of the objectives of decreasing violence in the project of "Healthy People

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2010" was to reduce physical violence against women by their male partners (5). Violence against women has been expressed as the most serious communal problem beyond cultural social and regional borders in the recent years (6). For more than a decade, violence has been considered an important issue in general health and mostly as an epidemiologic subject (7). Domestic violence is defined as exerting any violent behavior against another person and within family, and includes physical, mental, social, economic or sexual harm (8, 9). From the view point of the health experts, violence against women is a major problem in public health (10; it is even called "latent epidemics" (11). Each year, some 5.3 million cases of domestic violence occur in women older than 18 years of age, which incurs two million injuries and 1400 deaths (12- 14). In most cases, violence related-deaths are not registered accurately such as in suicide and substance abuse due to domestic violence (15). Violence leads to long term unavoidable consequences for the survivors, and continues even after the violent act has finished. Poor health status, low quality of life and less use of healthcare services, physical signs and gynaecological diseases are side effects of violence (16). Domestic violence occurs in every country and in all social, cultural, economic and religious groups (17).The prevalence of domestic violence has a different range, with approximately 15-71% worldwide (18). The prevalence of domestic violence was 36% in the United States (13), 67% in Japan (19) and 75.9% in Bosnia and Herzegovina (20). In Iran, the prevalence of domestic violence was 88.3% (21), 47.3% (22), 67.5% (23) and 79.94% (24). Violence can directly harm or indirectly act as a mediating risk factor and cause distress through increasing stress. Distress, in turn, leads to inadequate access to health care services and high risk behaviours like smoking and alcohol use, which incur huge expenses on healthcare systems. Infertile women may suffer more harm when tolerating symptoms of crisis, depression, bereavement, lack of control, severe anxiety or guilt (16, 25). However, women's health is directly related to the type, duration and severity of violence (26). The aim of the present study was to estimate the prevalence of domestic violence in infertile women referring to the selected infertility centres of Tehran, Iran in 2011.

Methods

This was a cross- sectional descriptive study conducted on 400 infertile women during December 2010 to May 2011. After obtaining permission from the authorities of the Shahid Beheshti University of Medical Sciences and infertility centers, we selected the participants through convenient sampling; and questionnaires were filled out through interviews in Tehran (Iran). The study population included infertile women who were diagnosed by a gynecologist and attended the selected infertility centers for treatment. After explaining the objectives of the study, written informed consent was obtained from the participants; and they participated in the study in a private setting. The participants were assured that all their information would remain confidential, and that they did not need to mention their names on the questionnaires. Their husbands did not have to be present at the time of the interview. This study was approved by Ethics Committee (No:88-01-86-6321-1, Dated 2009/03/08). All Ethical issues ─ informed consent, conflict of interest, plagiarism, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.─ have been considered carefully by the authors. The respondents were anonymous and participated willingly and voluntarily in this study. The inclusion criteria were being Iranian and passage of at least one year after their marriage. Demographics of the husbands were given by the participants. The data-collection tool was a researcher-made questionnaire that covered demographics of women and their husbands, and domestic violence. To prepare the domestic violence questionnaire, the domestic

violence questionnaire was revised. Finally, authors made a questionnaire which contained questions about physical violence with 21 items, emotional violence with 53 items and sexual violence with 11 items that happened three months prior to the study. The questionnaire was designed in LIKERT scale (always, often, sometimes, seldom, never), and it was validated through content validity by three psychiatrists, two psychologists and five researchers, who had studied domestic violence. To ensure the internal consistency of the domestic violence questionnaire, Cronbach's alpha was used ($\alpha = 0.89$), and its reliability was measured by test re-test with a 10 day interval ($r = 0.81$).

Statistical Analysis

Descriptive statistics, Spearman's test, t-test, one-way analysis of variance (ANOVA), logistic regression and SPSS16 software were used to analyze the data. The normality of the data was evaluated by the one-sample Kolmogorov-Smirnov test. Tukey test (Post Hoc) was used to analyze the results of ANOVA. Logistic regression was utilized to assess the reciprocal effect between the factors associated with domestic violence. In the logistic regression, independent variables (age, age of marriage, ethnicity, education, job, and…), and all the dependent variables (physical violence, emotional violence and sexual violence) were considered and encoded: always, often, sometimes, seldom = 1 and not domestic violence = 0. Then the variables were recoded. The significance level was set at $p< 0.05$.

Results

Demographic characteristics of the infertile women and their spouses are demonstrated in Tables 1 and 2. Most participants did not have a history of physical (90.7%) or known mental diseases (96%). We asked them about physical, mental and general health; and their health status was as follows: good physical health (65.7%), average mental health (55%) and good general

Table1. Distribution of infertile women by their characteristics.

Independent variables	Distribution of infertile women N(%)	Mean±SD
Age(years)		
<20	4(1)	
20-30	229(57.3)	30.50±6.16
>30	167(41.7)	
Age marriage(years)		
<20	115(28.8)	
20-30	233(58.3)	23.28±5.98
>30	52(12.9)	
Ethnicity		
Persian	232(58)	
Others	168(42)	
Education		
Illiterate	4(1)	
Primary school	11(2.7)	
Secondary school	44(11)	
High school	152(38.1)	
Above	189(47.2)	
Job		
Housewife	335(83.7)	
Employee	49(12.3)	
Self employed	6(1.6)	
Other	10(2.4)	
First marriage		
Yes	381(95.3)	
No	19(4.7)	
Wanted marriage		
Yes	383(95.7)	
No	17(4.3)	

Table 2. Distribution of spouse infertile women by their characteristics.

Independent variables	Distribution of spouse infertile women N(%)	Mean±SD
Age(years)		
20-30	121(30.2)	
>30	279(69.8)	34.8±8.40
Age marriage(years)		
20-30	306(76.6)	
>30	94(23.4)	28.01±10.09
Ethnicity		
Persian	245(61.3)	
Others	155(38.7)	
Education		
Primary school	13(3.3)	
Secondary school	38(9.4)	
High school	181(45.3)	
Above	168(42)	
Job		
Employee	131(32.7)	
Self employed	172(43)	
Worker	75(18.7)	
Others	22(5.6)	
First marriage		
Yes	352(88)	
No	48(12)	

health (51%). The prevalence of domestic violence, physical, emotional and sexual violence were 34.7%, 5.3%, 74.3% and 47.3%, respectively. Domestic violence was committed by the spouses. The relationship between domestic violence and demographics was assessed. The results of ANOVA revealed that domestic violence was significantly associated with self - reports of women about their mental state (P<0.01). Tukey test (posttest) showed higher mean scores of domestic violence in women who had weak mental status than those women who had moderate and good mental conditions (p<0.01) (Table 3).

The results of the logistic regression revealed that those participants who married younger compared to those married at an older age (ORp= 1.325, p= 0.013, CI:95%, 1.001-1.624) were more exposed to domestic violence; in addition, the followings were also found by the regression analysis: those with a shorter marriage duration as compared to those with longer marriage duration (ORp= 1.083, p= 0.028, CI:95%, 1.009-1.164), those dissatisfied with their marriage compared to those satisfied with it (OR=1.625, p= 0.012, CI:95%, 1.354-1.813), those who had microinjections compared to those who did not have any microinjections (OR= 1.392, p= 0.030, CI= 95%, 1.032-1.877) those women who self-reported a weak mental state compared to those who self-reported good and moderate mental state (OR=1.563, p= 0.005, CI= 95%, 1.213-1.834), women whose husbands were employed and had a high income compared to those whose husbands were unemployed (OR=1.928, p= 0.019 ,CI= 95%, 1.112-3.344), women whose husbands had other ethnic backgrounds (Turks, Lors, Kurds,…), compared to those women whose husbands were born in Tehran (OR= 1.837, p= 0.001, CI= 95%, 1.271-2.655), husbands' addiction to medication and opium compared to those who were not addicted (OR=1.783, p= 0.050, CI= 95%, 0.995-3.197), husbands' behavioral disorders compared to those who did not suffer from such disorders (OR= 1.825, p= 0.008, CI= 95%, 1.132-2.032) were more exposed to domestic violence.

Discussion

The prevalence of domestic violence, physical, emotional and sexual violence was 34.7%, 5.3%, 74.3% and 47.3%, respectively in this study. Yildizhan et al. (2009) found the prevalence of domestic violence against infertile women to be

Table 3. Correlation of domestic violence with demographic characteristics.

Independent variables	N(%)	Domestic violence		
Unwanted marriage		Mean(SD)	Test	p
yes	17(4.3)	4.82(5.57)		
No	383(95.7)	2.24(3.43)	T Test	p<0.01
Number of IVF attempts				
No	273(68.3)			
Once	87(21.7)			
Twice	27(6.7)		Spearman	p<0.05
+Twice	13(3.3)			
Mean	0.66			
SD	2.94			
Women being addicted to drugs				
No	392 (98.1)	2.50(1.33)	T Test	p<0.05
Yes	8 (1.9)	3.29(3.55)		
Smoking spouse				
Yes	245 (61.3)	3.11(3.27)	T Test	p<0.05
No	155 (38.7)	2.61(2.11)		
Spouse being addicted to drugs				
No	376 (94)	2.21(3.37)	T Test	p<0.01
Yes	24 (6)	4.68(6.72)		
Physical sickness of spouse				
No	365 (91.3)	2.09(2.97)	T Test	p<0.01
Yes	35 (8.7)	8.12(9.73)		
Mental sickness of spouse				
No	387 (96.7)	2.09(3.09)	T Test	p<0.01
Yes	13 (3.3)	3.68(5.66)		
Self-report women from her mental situation				
Good	133(33.2)			
Moderate	220(55)		ANOVA	p<0.01
Weak	47(11.8)			

33.6% (27) which was near to our finding. Comparable to our results, Ardabily et al. (2011) found the prevalence of domestic violence to be 61.8%, psychological violence 33.8%, physical violence 14% and sexual violence 8% in infertile women (28), which was higher than our study. Perhaps one reason for the difference between our study finding and that of Ardabily et al. (2011) is that their study was conducted in one center, but our research was conducted in three centers. We found that age at marriage was associated to domestic violence. Alazmy et al. (2011) observed that age correlated with domestic violence (29). Also, Qasemet al. (2013) found that age correlated with domestic violence (30). We studied infertile women who were referred for infertility treatment. Naturally, they took steps to preserve and complete their family unit. The present study also revealed that unwanted marriage was associated with domestic violence. Yildizhan et al. (2009) indicated that abused infertile women were mostly unsatisfied with their sexual lives (27). One of the factors in the incidence of domestic violence and risk of marital breakdown is men and women's lack of knowledge of their real roles in the family and the society. Based on the findings of this study, the number of microinjections were associated with domestic violence. Undoubtedly, the clinical efforts and technology have improved outcomes in infertile couples. Rangi et al. (2005) suggested that different treatment modalities might result in different quality of life outcomes. In the case of IVF treatment, failure of IVF might have a negative impact on patients' quality of life (31). In our study, general health assessment was significantly associated with domestic violence ($p<0.05$). Several researchers have reported that in confrontation with life stresses, women use concentrated confrontation on excitement more than men (32). Usta et al. (2007) indicated that women's health status predicted domestic violence (33). Infertility as a major stressor happens unexpectedly (34). The infertile couples suffer from chronic stress

if fertilization does not occur (35). Research shows that domestic violence against women is mostly affected by psychosocial factors. According to the theory of human needs, the grounds for violence, hypersensitivity, individual's reaction to external stimuli like expecting every married woman to be fertile lead to inability (36). Many studies have revealed that infertile women, compared to the fertile, have lower quality of life and are more prone to anxiety and depression (27, 37). The biological process of fertility can be affected by stress and complicate the infertility problem. Anxiety reduces adjustment, and accordingly affects implantation (38). Based on the findings of this study, husbands' employment predisposed domestic violence (OR = 1.928). Naved & Persson (2008) reported a positive relationship between low-income and domestic violence (39). In contrast, Maleki & Nezhadsabzy (2010) found no significant associations between domestic violence and income of the husband (40). However, we found a positive relationship between low- income and domestic violence. Emphasis on the direct relationship between poverty and violence in the society and family has been expressed as important underlying factor of domestic violence against women. We found significant associations between domestic violence and husbands' ethnicity. Nohjah et al. (2011) reported a positive relationship between ethnicity and domestic violence (22). This issue can lead to violence because in some cultures men are the symbol of power, this sometimes is manifested by violence. All countries and societies have norms embedded in the culture that may exacerbate gender-based violence (41).The authors indicated that domestic violence was associated with husbands' addiction. Aklimunnessa et al. (2007) found a significantly higher prevalence and higher odds ratio of domestic violence among those husbands who did smoke, chewed tobacco and used drugs (42). Taherkhani et al. (2009) obtained that domestic violence was associated with husbands' smoking (21). In many men, their high-risk behaviors predisposed them to domestic violence (43). In our study, husbands' behavioral disorders were associated with domestic violence. Taherkhani et al.(2009) indicated that domestic violence was associated with mental diseases of women andtheir spouses (21). Abedinia et al.(2009) found that the prevalence of depression among infertile couples was higher in Iran than some other countries (44). Autonomy and decision-making power of women in the society, social and cultural differences of families, lack of education and awareness, collective and moral corruption, high prevalence of addiction, alcohol abuse, family up-bringing, growth of patriarchal attitudes, poor emotional relationship between men and women, couples' lack of communication skills, inability to resolve differences through intellectual engagements, solving marital problems and ignorance of spousal rights are factors causing violence. Most infertile women are afraid of divorce and have no social support, no sufficient income or a job (45). Lack of awareness and providing no trainings for the doctors and staff of the healthcare sector of the country to deal with women victims of violence is a major weakness of our health system.

Conclusion

Many of the current problems in this society, particularly in families are due to the transition of the society from a traditional model to a modern one. Increasing educational level, employment and financial independence of women and change in the social structure of the family have led to a change in women's role within the family and society. On the other hand, incompatibility of men and women with these changes, and the new lifestyles lead to complications and increased level of stress in the society and in the families. In the mist of all this, increased qualitative and quantitative contact with the outside world through the media and travels and learning about cultures of different communities intensifies

the impact of this problem. Domestic violence in infertile women had a prevalence of 34.7%. Reasons for the violence were primarily domestic issues that may have been related to the infertility of women. We still know too little about the cultural context of violence against women. Our findings highlight the need for urgent measures to educate men on reproductive health issues. Health care providers and counselors should support these women and assess infertility stress and try to make the necessary measures to reduce this stress. We recommend increasing the couples' awareness about infertility, their efficient and intimate relationship, recognizing the factors inspiring domestic violence, and empowering women in economic and public aspects. The limitations of this study were addiction of infertile women or their spouses to alcohol, cigarette and drugs that may have not been expressed due to cultural or social issues; and this may have exposed them to violence, but they kept it as a secret for different cultural and social reasons like shame and embarrassment.

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