

Original Article

Domestic Violence Against Women Attending Gynecologic Outpatient Clinics

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Background: Violence against women and threat of violence are some of the main barriers to women's empowerment and equal participation in the society. However, they often go unnoticed and undocumented and therefore unresolved. For women, one of every five years of healthy life lost because of injury, disease, or premature death is attributable to violence.

The aim of this study was to identify the prevalence of domestic violence in women attending three obstetric and gynecologic clinics in Tehran, and to determine the association between domestic violence and demographic factors.

Methods: One thousand women, 15 – 64 years old, attending three obstetric and gynecologic clinics affiliated to Iran University of Medical Sciences in Tehran were invited to participate in a cross-sectional survey with self-administered questionnaire.

The association between demographic factors (age, level of education, religious believes, annual income, job, husband's employment status, drug and alcohol abuse, previous custody of husbands) and domestic violence was assessed by questionnaire.

Results: Five hundred and ninety out of the 1000 women had experienced at least one form of violence (physical, mental, not sexual) from their husbands, 196 women had experienced some forms of controlling behavior and mental violence, and 361 women had been physically threatened. Low level of education in women, nongovernmental job, previous custody, psychiatric disorders of men, and coercive marriage for women were associated with an increased risk of domestic violence.

Conclusion: With the high prevalence of domestic violence, health workers should not ignore the seriousness of domestic violence. Health and social personnel should be appropriately trained before "asking all cases" becomes a policy within health and social services.

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Introduction

Violence against women and girls is a major health and human rights concern. Women may experience physical or mental abuse throughout their life; in infancy, childhood, adolescence, or during adulthood.

The Declaration on the Elimination of Violence against Women (1993) defines violence against women as "any act of gender-based violence that

results in, or is likely to result in physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life".¹

Violence is a serious insult to the human rights of women and girls, and it takes a heavy toll on physical and mental health. The World Bank estimates that rape and domestic violence (DV) account for 19% of the total disease burden among women aged 19 – 44 in industrialized countries.¹ This means that, for women, one of every five years of healthy life lost because of injury, disease, or premature death is attributable to violence.¹

According to a review, the prevalence of experiencing violence in women at any time during their life ranges from 9.7% to 29.7%.¹

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Studies in accident and emergency departments have shown that most women who had experienced DV were not identified by nurses and doctors.² One study based on medical records in the primary care setting in the United States showed that fewer than 10% of women experienced DV had been identified by doctors.³

Another study on pregnant women in Tehran showed that physical violence against women during pregnancy was 10.7%. Experience of physical abuse 3 months before pregnancy was 11.9%.⁴

The risk of violence is most strongly associated with characteristics of the partner, particularly use of alcohol, drug, and previous custody. In a study on women who had attended to Forensic Medicine Center in Tehran, about one-third of women's husbands had history of previous custody. Alcohol and drug use between husbands of those women was reported more than general population.⁵

Development of effective preventive interventions requires a better understanding of the cause of violent behavior against women and recommendation for examining the burden of the problem and risk factors.

We conducted the current study to determine the prevalence of DV in a population of women attending three gynecologic outpatient clinics in Tehran, Iran, and also to investigate the risk factors of DV.

Materials and Methods

Study design

We conducted a cross-sectional study at gynecologic outpatient clinics of three hospitals affiliated to Iran University of Medical Sciences in Tehran, Iran. The clinics have diverse clientele, ensuring a broad representation of women. The Institutional Review Board of Research approved the study. All subjects provided oral consent, and all were guaranteed anonymity.

Study population

The study population consisted of 1000 married women, attending the three gynecologic outpatient clinics, who sought medical care for any problems. We defined an eligible woman as any married or recently married woman, 15 to 64 years old, who had attended the gynecologic clinics and had admitted to participate in the study. At each study site, for periods of up to 12 months, research assistants identified, selected, and interviewed all

consecutive eligible female attendants. Women who had never married, were too unwell (ill or mentally ill) to complete the questionnaire, and not able to speak Persian language were excluded. The method of selecting the subjects was nonrandom convenience sampling. Research assistants recruited women in the gynecologic clinics' waiting areas, and the women completed the questionnaire in the waiting areas.

Variables

The study variables were selected on the basis of findings from literature. We designed a structured and close-ended questionnaire. The questions looked at different aspects of DV. The questionnaire consisted of two parts. At the first part, there were some questions about demographic characteristics of the women (age, level of education, religion, annual income of the husbands, job, husband's employment status, history of chronic disease, intentional marriage, alcohol and drug use of the women and their husbands, and history of husband's custody). We defined coercive marriage as any unwanted marriage (with force of parents). Drug and alcohol use was asked by this question "Have you ever used alcohol or drug in your life?". History of chronic disease was asked by this question "Do you have any longstanding physical or mental illness or disability that has troubled you for a long time?".

At the second part, there were questions about DV. DV was categorized as any physically (any assault that hurt women physically) or mentally (any assault that hurt mental health of women, e.g., contemptuous behaviors) assault against women by their husbands during any time in the past.

The income was categorized as low (less than \$200 per month), moderate (between 200 to \$400 monthly), and well (more than \$400 per month). The religious status was categorized as weak (doing less than 50% of religious duties), moderate (between weak and substantial), and substantial (doing religious duties completely and regularly). We also recorded the seeking of medical attention by the women. The questionnaire was completed in one session, after which minor changes were made to the wording and layout.

Data collection

Data were collected in a period of 12 months, from April 2003 through April 2004. Information regarding the variables was collected from all the

women while they were waiting for medical evaluation with the use of a structured and close-ended questionnaire by interview. The content validity of the questionnaire was determined by an extend literature review and expert panel. The reliability of the questionnaire by a pilot study based on Cronbach's Alpha coefficient was 70%. We selected about one-third of sample size from each study site.

Statistical methods

We entered the data gathered from the questionnaire with the double data entry method. The data were analyzed using SPSS software version 11.5. We first examined the distribution of the socioeconomic and demographic characteristics of the women. We reported bivariate analyses with Chi-square, and Fisher's exact tests for frequencies and *t*-test and one way analysis of variance for quantitative variables. Multiple logistic regression analysis was used to identify the demographic variables that were significantly related to DV. For the purpose of this analysis, we included any woman who had ever experienced any type of physical, and/or mental violence from her husband as a binary dependent variable. All independent variables were included in the model as binary or continuous. We used odds ratio to estimate the relative risk

Results

At the three gynecologic clinics, 1000 women were identified and agreed to participate in the study. The percentage of missing values for all violence-related variables ranged from 2 to 5% (average 3.5 %). The baseline characteristics of the selected women and their husbands are shown in Table 1. The mean age of the women was 28.3 (± 8.7) years. The mean duration of marriage was 8.5 (± 9) years, ranging from one to 50 years.

Overall, 590 (59%, 95% CI; 57 to 63%) of 1000 women had ever experienced any form of violence (physical or mental, not sexual) from their husbands. In total, 196 (19.6%, 95% CI; 17.5 to 22%) of 1000 women had experienced any form of controlling behavior and mental violence by their husbands, and 361 (36.1%, 95% CI; 33 to 39%) women had been physically threatened.

Based on the responses from 974 women, 299 (30.7%) women had ever had injuries, including bruises or more serious injuries, from violence. Of the 590 women who had experienced any type of

violence, 179 (30.3%) had sought medical, forensic, or consultant attentions for their problems.

The mean number of children and women's age were significantly different between the two groups (1.6 ± 1 and 29.4 ± 9 in the violence group, respectively vs. 1.3 ± 1 and 26.8 ± 6 , respectively in another group) ($P < 0.001$). The baseline characteristics of the women according to the violence history are presented in Table 2. Women, with less than high school education had a statistically significant association ($P < 0.02$) with DV (61.8 % vs. 51.2 % in women without violence).

The women's job did not have significant association with violence. Women with violence history had higher income than women without violence (34% vs. 21%), and this difference was significant ($P < 0.001$).

Substantial religious believes was more in women with history of violence than women without such history and between husbands of these women (42.7% and 41.7% vs. 35.8% and 35.6%) ($P < 0.01$).

Coercive marriage was 13.4% in women with positive history of DV vs. 3.2% in women without history of DV with a statistically significant difference ($P < 0.001$).

There was not any woman with the history of drug abuse between women without violence history, but 3% of women in the other group had such a history. This difference was statistically significant ($P < 0.003$).

There was significant relation between husbands' job, education, religious believes, history of drug abuse, history of custody, and psychiatric disorders with the violence against their wives (Table 2).

The results of multivariate analysis are shown in Table 3. According to the result of logistic regression, the factors that were associated with increased risk of violence included low level of women's education (adjusted odds ratio, 2.2; 95% CI; 1.2 to 3.9), nongovernmental job of husbands (adjusted odds ratio, 1.9; 95% CI; 1.3 to 2.6), psychiatric disorders of husbands (adjusted odds ratio, 2.9; 95% CI; 1.4 to 6.0), coercive marriage (adjusted odds ratio, 3.1; 95% CI; 1.6 to 6.0), and husbands' custody (adjusted odds ratio, 10; 95% CI; 3.8 to 31).

The factors that were associated with decreased risk of violence included high school graduation of husbands (adjusted odds ratio, 0.49; 95% CI; 0.3 to

Table 1. Baseline characteristics of the women and their husbands.

Characteristics of the women	Number (n = 1000)	Percentage
Level of education*		
Less than high school	469	57.5
High school	266	26.6
More than high school	159	15.9
Occupation		
Housewife	841	84.1
Employed	159	15.9
Monthly household income		
Low	211	21.1
Moderate	501	50.1
Well	288	28.8
Religious status		
Weak	131	13.1
Moderate	465	46.5
Substantial	404	40.4
Pregnancy status		
Yes	586	58.6
No	414	41.4
Chronic disease history		
Yes	75	7.5
No	925	92.5
Coercive marriage		
Yes	92	9.2
No	908	90.8
Drug use		
Yes	18	1.8
No	982	98.2
Violence history (any, except sexual)		
Yes	590	59
No	410	41
Characteristics of the husbands		
Level of education		
Less than high school	854	85.4
High school	53	5.3
More than high school	93	9.3
Occupation		
Unemployed	38	3.8
Nongovernmental job	589	58.9
Governmental job	331	33.1
Unknown	42	4.2
History of custody		
Yes	100	10
No	900	90
Religious status		
Weak	138	13.8
Moderate	481	48.1
Substantial	381	38.1
Drug or alcohol use		
Yes	108	10.8
No	892	89.2

* There was some missing data.

0.7), and moderate income (adjusted odds ratio, 0.5; 95% CI; 0.3 to 0.7). The other significant variables in bivariate analysis were not significant risk or protective factors in multivariate analysis.

Discussion

Our results show that the prevalence of lifetime

DV was 59%, and lifetime threatening physical abuse was 36.1%.

Nineteen point six percent of the women had experienced some form of controlling behavior and mental violence by their husbands. In one study on violence against women in a primary health care unit in Brazil, 44.4% of women reported at least one episode of physical violence in their adult

Table 2. Baseline characteristics of the women and their husbands by violence.*

Characteristics	With violence (n = 590)	Without violence (n = 410)	P value
Women			
Level of education			
Less than high school	365 (61.8)	210 (51.2)	< 0.02
High school	132 (22.4)	134 (32.7)	
More than high school	93 (15.7)	66 (16.0)	
Occupation			
Housewife	504 (85.4)	337 (82.2)	0.08
Occupying	86 (14.5)	73 (17.8)	
Monthly household income**			
Low	111 (19.6)	95 (23.0)	<0.001
Moderate	273 (46.3)	228 (55.6)	
Well	201 (34.0)	87 (21.2)	
Religious status**			
Weak	91 (15.4)	40 (9.8)	<0.01
Moderate	272 (46.1)	193 (47.1)	
Substantial	227 (38.5)	175 (42.7)	
Chronic disease history			
Yes	54 (9.2)	21 (5.1)	<0.01
No	536 (90.8)	389 (94.9)	
Coercive marriage			
Yes	79 (13.4)	13 (3.2)	<0.001
No	511 (86.6)	397 (96.8)	
Drug use			
Yes	18 (3.0)	0 (0)	<0.003
No	572 (97.0)	410 (100)	
Husbands			
Level of education**			
Less than high school	368 (62.3)	211 (51.4)	<0.001
High school	94 (15.9)	122 (29.8)	
More than high school	106 (17.9)	49 (11.9)	
Occupation			
Unemployed	25 (4.2)	13 (3.2)	<0.005
Nongovernmental job	373 (63.2)	216 (52.7)	
Governmental job	168 (28.4)	163 (39.7)	
Unknown	24 (4.1)	18 (4.4)	
History of custody			
Yes	96 (16.3)	4 (1.0)	<0.001
No	494 (83.7)	406 (99.0)	
Religious status			
Weak	100 (16.9)	38 (9.3)	<0.02
Moderate	280 (47.5)	201 (49.0)	
Substantial	210 (35.6)	171 (41.7)	
Drug or alcohol use			
Yes	96 (16.3)	12 (2.9)	
No	494 (83.1)	398 (97.1)	
History of psychiatric disorder			
Yes	55 (9.3)	11 (2.6)	<0.001
No	535 (90.6)	399 (97.4)	

*Numbers in parenthesis are percentages; *Because of rounding, not all percentages total 100.

** There was some missing data.

life.⁶ In another study in Hackney, London, this rate was 41%.² In our study, the prevalence of physical violence was 34.3%. This percentage is in the range of the results found in other surveys.⁷⁻¹⁰ In Accident and Emergency Department of United Kingdom, the prevalence of lifetime physical abuse was 34.8%.¹¹ In Accident and Emergency Departments in the United States and some other

countries the same estimates have been described.¹²⁻¹⁵ The prevalence of physical violence in a population of women attending a gynecologic outpatient clinic in the United Kingdom, was reported 21%.¹⁶ Thus, this variation of prevalence rate maybe due to the difference in population, setting, and definition of the problem.

In our study, multivariate analysis showed that

Table 3. Estimate of the adjusted odds ratio of DV, according to the baseline characteristics of the women by logistic regression.

Variables	B	SE	Wald	df	P value	Odds ratio and CI*
Women age	0.019	0.012	2.54	1	0.11	1.09 (0.99 – 1.04)
Number of children	0.058	0.073	0.64	1	0.42	1.06 (0.91 – 1.22)
Education of women	0.82	0.28	8.16	1	0.004	2.27 (1.29 – 3.99)
Education of men	- 0.70	0.23	8.80	1	0.003	0.49 (0.30 – 0.78)
Husbands' job	0.64	0.17	14.40	1	0.000	1.91 (1.36 – 2.67)
Religious status of women	0.54	0.33	2.66	1	0.10	1.72 (0.89 – 3.30)
Religious status of husbands	0.03	0.34	0.009	1	0.92	1.01 (0.48 – 1.88)
Psychiatric disorder of husbands	1.08	0.36	8.94	1	0.003	2.96 (1.45 – 6.03)
Coercive marriage	1.14	0.33	11.47	1	0.001	3.14 (1.62 – 6.0)
Husbands' custody	2.39	0.53	19.95	1	0.000	10.95 (3.83 – 31.32)
Husbands' drug or alcohol use	0.59	0.35	2.85	1	0.09	1.82 (0.90 – 3.64)
Income	- 0.68	0.20	11.76	1	0.001	0.50 (0.34 – 0.74)
Constant	- 0.70	0.38	3.39	1	0.06	0.49

* Confidence interval of odds ratio

history of chronic disease in women, religious status, and drug abuse of women and their husbands were not significantly associated with DV. But bivariate analysis showed such association. However, having substantial religious believes may prevent the violence by the fact that these women and their partners know about futurity and punishment of people who danger others.

Alcohol and drug abuse by women and their husbands were associated with increased likelihood of DV; although, this association was obscure in multivariate analysis ($P = 0.09$). Also, because of the sensitivity of questions about drug and alcohol use, the rate of these variables in this study was prone to prestige bias and probably was underestimated. The precise mechanism by which alcohol acts to increase the risk of DV is not clear, but physiologic, psychologic, and environmental factors may all be important. Alcohol effect on violence was challenged in some studies,^{17–19} and it was shown that decreasing alcohol consumption may reduce this risk.^{20,21}

The association between drug abuse by women and their husbands, and DV in our study are similar to those described in other studies.^{22–24}

We also found that nongovernmental job and unemployment of the husbands were risk factors. Probably, the stress of job finding and stress of business and trade in private sector, increase the risk of abusing the wives by their husbands. The study on the risk factors of DV in the United States showed the same result.²⁵

Low level of women's education was associated with increased risk of violence. This can be

explained by the fact that educated women have the knowledge about their rights and relationships, and can control their behaviors properly. Maybe, these women are employed, and their incomes affect the family economy positively.

Low level of education in men was also associated with increased risk of DV. Lack of fixed jobs or unemployment can be two risk factors for violence in such men.

In multivariate analysis, the risk of violence was strongly associated with previous custody. This result has been reported in another study too.⁵ The precise reason for this relation is fairly clear. Most men with history of custody have other risk factors for doing assault against women, such as unemployment, low level of education, financial problems, and so on.

Our study may have some limitations. Our sample was not representative of all women in our setting. We used data from three hospitals and women who attended these hospitals are only representative of women who seek any health services in the hospitals. However, our sample size was large, and it can be a powerful aspect of our study.

The use of self reporting assessment because of the sensitive nature of DV may underestimate the true prevalence, and the use of recall over lifetime may introduce further bias.

The possibility of selection bias should be in mind because the rates of women who wished to participate were different from those who did not. We excluded women who were ill or were mentally ill and this can cause another type of selection bias too.

Definition of variables may also have biased our results. Since reports of most of the study variables (e.g., age, income, level of education, and employment status) were not subjected to substantial errors, degree of bias resulting from error in measuring these variables is likely to be low. But, definition of alcohol and drug abuse, religious status, chronic disease history, and psychiatric disorders were more likely to be biased.

Further studies are needed for better understanding of the other factors associated with violence among women in the context of designing and implementing appropriate interventions to reduce violence.

According to our data, DV is common for women. Low education of women and men, men's job, coercive marriage of women, previous custody and psychiatric disorder of men, and men's drug and alcohol abuse were the factors associated with violence.

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