Health Impact of Domestic Violence against Saudi Women: Cross Sectional Study

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Abstract

Objective: Domestic violence is a major public health problem. A wide range of health hazards result from violence against women directly, or from its long-term consequences. The objective of this study is to determine health related consequences of domestic violence against women.

Method: A community based cross-sectional study was carried through online survey; convenience sample was taken during the period between December 2013 and February 2014. 421 women completed the survey, who met the inclusion criteria and accepted willing to be a part of this study. The data was collected through online survey website. A validated Arabic version of *NorVold Domestic Abuse Questionnaire* (NOVAQ) was used as a tool to assess domestic violence among the study sample. Analysis was performed using SPSS, version 18.0.

Results: A total of 421 women participated in the survey. There was no significant correlation between socio-demographic characteristics and being abused or not. However, by further analysis we found more sexual abuse among non-working women *P=0.048.* There was significant correlation between abused women and general health status, doctor visits, depression, insomnia, and somatic symptoms.

Conclusion: The consequences of abuse are profound, extending beyond the health of individual to affect the well-being of entire community. So, we recommend to increase community awareness through national awareness campaign, national prevalence survey of domestic violence and well trained health professionals for assessing domestic violence cases.

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Introduction

Domestic violence (DV) against women is a global problem without cultural, geographic, religious, social, economic or national boundaries. It is considered as a widespread phenomenon and one of the most serious violations of human rights. Violence against women as a social problem mostly within close/immediate social settings has serious consequences affecting not only female victims' physical and emotional health, and social well-being, but has considerable effects on family members and society as whole. [1]

The United Nations 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 in private life". [2]

The World Health Organization (WHO) multi-country study on DV found that between 15% and 71% of women reported physical or sexual violence by a husband or a partner. [3] A more recent data of WHO with the London School of Hygiene and Tropical Medicine and the Medical Research Council, based on results of multiples studies over 80 countries, found that globally 35% of women have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence, most of this violence is intimate partner violence. Worldwide, almost one third (30%) of all women who have been in a relationship have experienced physical and/or sexual violence by their intimate partner, in some regions this is much higher. Globally as many as 38% of all murders of women are committed by intimate partners. [2] Domestic violence against women is still a high public health concern, especially as it continues to be accepted as "normal" within many societies. [4-7]

The World Bank estimated domestic violence to be as serious cause of disability and death among women aged 15 to 44 years as cancer, and a greater cause of ill health than motor vehicle accidents, war and malaria combined. [8] A wide range of health hazards result from violence against women directly, or from its long-term effects. They include injuries, death, sexual, reproductive, mental, and physical health problems. [2, 9] Abused women had increased risk of acute respiratory tract infection, gastro esophageal reflux disease, chest pain, abdominal pain, urinary tract infections, headaches, and contusions/abrasions. [10] Unintended head, neck, or facial injuries are considered significant markers for domestic violence among women presenting to the emergency room department. [11]

Many studies have shown the magnitude of the impact of domestic violence on women's health, although the impact on the mental health of the victims has been more widely studied than the impact on physical health. It has been demonstrated that women who are abused by their partners may suffer up to 60% more physical illnesses than women who are not victims of such violence. [12]

Until quite recently, DV was a hidden problem in Saudi Arabia. A community based-study was conducted in Al-Ahsa, Saudi Arabia and showed the association between violence and bad general health, abortion, increased body mass index, increased the number of doctor visits, and dizziness. [13] The current study was designed to determine the impact of the domestic violence against women in Saudi Arabia.

Methods

The study was carried out through an online survey. The study took place between December 2013 and February 2014. The study design was a cross-sectional survey. A total of 421 participants who completed the survey and met the inclusion criteria of the study were included. Inclusion criteria for this study were being Saudi women and between 14-55 years old. Data were collected through an online survey tool powered by Survs. The self-administered questionnaire link was distributed through social networks. The distribution of the questionnaire was done with the help of multiple public social organizations in Saudi Arabia through their official accounts on social network. The individual consent was taken for data collection, it was written on the front page of the questionnaire.

After the permission was taken from the author, [14] a validated Arabic version of *NorVold Domestic Abuse Questionnaire* (NOVAQ) was used as a tool to assess DV among the study population.

The questionnaire consisted of four main parts:

First part included personal, socio-demographic characteristics (age, education,

marital status, occupation, residency, type of house: *rented or owned*, and monthly income), general health status, frequency of doctor visits, insomnia, depression, and somatic symptoms during last year.

Second part included questions about emotional abuse, *third part* included questions about physical abuse, and *last part* included questions about sexual abuse. Any participant who answered (*yes*) of any type of abuse was asked to fill up: age of first abuse, abuse during last year, impact of abuse and the disclosure.

A preliminary pilot study on a group of women not belonging to the study population was conducted earlier to check for ambiguous items, and appropriate changes were made.

The analysis was done for only those who completed the survey. Data entry and statistical analyses were done using SPSS version 18.0 statistical software package, and quality control was conducted at the various stages of coding and data entry. Descriptive statistics were used to present means, standard deviations and percentages. Chi square was calculated for analytical statistics. A significance level of *P* less than 0.05 was considered significant throughout the study. Approval was obtained from the research committee of family medicine residency program.

Results

A total of 421 Saudi women participated in the survey, all 421 women were enrolled in the study and all were included in the final analysis. **(Table 1)** Participants' ages ranged from 14 to 55 years with an average 29.88 ± 8.82. Married women constituted 48.2% of the study population (n=203); 179 (42.5%) women were single, 34 (8.1%) were divorced, 5 (1.2%) were widow. The majority of study subjects (82.2%) held a university degree or higher in their educational level, 68 (16.2%) were high school level, 5 (1.2%) were intermediate, and only 2 (0.5%) elementary level. 397 (94.3%) of women were living in urban cities; and only 24 (5.7%) women were living in rural areas. Almost two-thirds the subjects (69.4%) live in their own houses where (30.6%) live in rental houses. More than half of the subjects (57.7%) were not working, 178 (42.3%) were working in different careers. Monthly income of most women (55.1%) was ranging from 5000-15000 SR, were 84 women (19.9%) was less than 5000 SR, and 105 women (25%) more than 15000 SR.

Table 1. Socio-demographic characteristics of Saudi women surveyed for domestic violence

Characteristics	No	%
Age		
Mean ± SD	29.88±8.82	
Min-Max	14-55	
Marital status		
Single	179	**42.5**
Married	203	**48.2**
Divorced	34	**8.1**
Widow	5	**1.2**
Educational Level		
Elementary	2	**0.5**
Intermediate	5	**1.2**
High School	68	**16.2**
University	346	**82.2**

Residency		
Urban	397	**94.3**
Rural	24	**5.7**
Housing type		
Own House	292	**69.4**
Rental House	129	**30.6**
Working status		
Working	178	**42.3**
Not working	243	**57.7**
Monthly income		
<5000	84	**20.0**
5000-<10000	149	**35.4**
10000-<15000	83	**19.7**
15000-<20000	52	**12.4**
20000 & above	53	**12.6**

Among those emotionally abused (75.1%) disclosed the abuse to someone and 21.3% of them told their doctors. Among those physically abused (57%) disclosed the abuse to someone and 17.8% of them told their doctors. Among those sexually abused (34.4%) disclosed the abuse to someone and 9.3% of them told their doctors.

There was no significant correlation between socio-demographic characteristics and being abused or not **(Table2)**, but with further analysis we found more sexual abuse among non-working women (P=0.048).

Table 2. The relation between socio-demographic characteristics and abuse status of surveyed women for domestic violence

Characteristics	No	allover violence				Chi square	P-value
		Yes		No			
		No	%	No	%		
Age							
Mean ± SD		29.49±8.72		30.77±9.03		1.361	**0.174**
Marital status							
Single	179	129	**72.1**	50	**27.9**	3.916	**0.271**
Married	203	133	**65.5**	70	**34.5**		
Divorced	34	27	**79.4**	7	**20.6**		
Widow	5	4	**80.0**	1	**20.0**		

Educational Level							
Elementary/Intermediate	7	4	**57.1**	3	**42.9**	0.540	**0.763**
High School	68	47	**69.1**	21	**30.9**		
University	346	242	**69.9**	104	**30.1**		
Residency							
Urban	397	277	**69.8**	120	**30.2**	0.103	**0.748**
Rural	24	16	**66.7**	8	**33.3**		
Housing type							
Own House	292	204	**69.9**	88	**30.1**	0.032	**0.858**
Rental House	129	89	**69.0**	40	**31.0**		
Working status							
Working	178	116	**65.2**	62	**34.8**	2.857	**0.091**
Not working	243	177	**72.8**	66	**27.2**		
Monthly income							
<5000	84	59	**70.2**	25	**29.8**	6.458	**0.167**
5000-<10000	149	111	**74.5**	38	**25.5**		
10000-<15000	83	59	**71.1**	24	**28.9**		
15000-<20000	52	34	**65.4**	18	**34.6**		
20000 & above	53	30	**56.6**	23	**43.4**		

However, there was significant (P < 0.05) correlation between abused women and general health status, doctor visits, feeling of depression, insomnia and somatic symptoms **(Table 3).**

The highly significant results was seen in emotionally abused women that inversely related to a good health status (P < 0.00), more doctor visit per years (P = 0.002), feeling of depression (P < 0.00), insomnia (P < 0.00), and somatic symptoms (P < 0.00), but in relation to severity of abuse, in emotional abuse; only doctor visits per year was significantly increased with the severity of abuse (P = 0.038). Similarly, physical abuse was significantly associated with poor health status (P=0.008), more doctor visit per year (P=0.010), feeling of depression (P < 0.00), insomnia (P < 0.00), and somatic symptoms (P=0.032), however; the relation with the severity of physical abuse which was significant which showed inversely relation to good health status (P=0.001), more feeling of depression (P=0.030), insomnia (P= 0.002), and somatic symptoms (P=0.005). Sexual abuse showed significant correlation in feeling of depression (P=0.010) and insomnia (P < 0.00), and only feeling of depression was significantly increased with severity of sexual abuse (P=0.0450).

Table 3. The relation between general health status and abuse status of Saudi women surveyed for domestic violence

Characteristics	No	allover violence				Chi square	P-value
		Yes		No			
		No	%	No	%		
How do you describe your health status							
Very good	233	151	**64.8**	82	**35.2**	8.200	**0.042**
Sometimes good	163	120	**73.6**	43	**26.4**		
Sometimes Bad	20	17	**85.0**	3	**15.0**		
Very bad	5	5	**100.0**	0	**0.0**		
How many times did you visit your doctor during last year							
Non	90	62	**68.9**	28	**31.1**	10.001	**0.018**
1-3 times	199	126	**63.3**	73	**36.7**		
4-6 times	84	66	**78.6**	18	**21.4**		
7 times and above	48	39	**81.3**	9	**18.8**		
During last year, Did you have insomnia that affect your daily life							
No	166	96	**57.8**	70	**42.2**	25.904	**0.000**
Yes, rarely	134	95	**70.9**	39	**29.1**		
Yes, sometimes	77	61	**79.2**	16	**20.8**		
Yes, most of the time	44	41	**93.2**	3	**6.8**		
During last year, Did you feel that you are depressed							
No	88	39	**44.3**	49	**55.7**	53.667	**0.000**
Yes, rarely	150	96	**64.0**	54	**36.0**		
Yes, sometimes	130	110	**84.6**	20	**15.4**		
Yes, most of the time	53	48	**90.6**	5	**9.4**		
During last year, Did you have any problem with your body (body ache, abdominal pain, headache. etc..)							
No	93	52	**55.9**	41	**44.1**	12.267	**0.007**
Yes, rarely	181	129	**71.3**	52	**28.7**		
Yes, sometimes	104	77	**74.0**	27	**26.0**		
Yes, most of the time	43	35	**81.4**	8	**18.6**		

Discussion

Over the past years, there has been a rapid growth in the body of research evidence available on health effects of domestic violence. Nevertheless, in Kingdom of Saudi Arabia, violence against women started to be a major health concern among health professionals during last few years, especially after the formation of General Directorate for Social Protection under the Ministry of Social Affairs in 2004-2005. [15]

The reasons for the relationship between abuse and socio-economic status as measured by education and income is not clearly understood. Violence against women often effects those with the fewest resources. In this study, socio-demographic characteristics of women showed no significant difference between those being abused and non-abused which could be due to minimal socio-demographic differences among the participants as their education and economic status was almost same. While other studies reported high abuse rate among less educated and underprivileged/poverty-stricken women. [16]

Health consequences of domestic violence against women were well documented. The current study showed that DV affected all aspects of health. Women who experienced DV in the present study reported more insomnia, and somatic complaints (e.g. abdominal pain, headache, dizziness, etc.). This is consistent with the findings of the WHO multi-country study on women's health and domestic violence. [17]

The current study revealed higher doctor visits among emotionally and/or physically abused women which is in compliance with studies done in Nicaragua, the United States and Zimbabwe indicated that women who have experienced physical or sexual assault, either in childhood or adulthood, use health services more frequently than their non-abused peers. [22-27]

As DV is considered a hidden problem associated with social stigma, fear from perpetrator, hope of change, self-blame and acceptance as a norm in some instances. The current study documented low rate of disclosure of abuse among women to the physician as compared to someone else in their lives. Similarly, other researches on disclosure of violence suggests that under-reporting is more common than over-reporting of violence. [28-30] Studies of injury recall have shown that major injuries are more likely than minor injuries to be over-reported with recall periods of 1 year or more. [31-32] It is possible that people who report ill health are more likely to recall experiences of violence: for example, women who felt depressed might have recalled more negative events than other women might.

It is often felt that domestic violence against women is a sensitive topic to be explored in a population-based survey, and that shame, self-blame or fear of further violence will prevent women from discussing their experiences. However, this study was conducted through an online survey to ensure safe, confidential, and comfortable circumstances to the participants.

The current study, as in other field studies has its limitations. The study data were based on self-reported questionnaire, which might underestimate or overestimate the health impact of domestic violence. A convenience sample was used, which may limit the generalizability of the study. However, in spite of these limitations, this study provides an important baseline information on this important social and public health problem in Saudi Arabia.

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Conclusion and recommendation

The consequences of abuse were profound, extending beyond the health and happiness of individuals to affect the well-being of entire community. Living in a violent relationship affects a woman's sense of self-esteem and her ability to participate in community. Therefore, we recommend increasing awareness of community through national awareness campaigns; also national prevalence survey of domestic violence is needed, and well trained health professionals to assess domestic violence cases.

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