

Magnitude and determinants of domestic violence against ever married women in Sohag, Egypt

Rasha Abd Elhameed Ali¹, Rania Ahmed Radwan²

¹Department of Public Health and Community Medicine, Faculty of Medicine, Sohag University, Sohag Governorate, Egypt, ²Department of Forensic Medicine, Faculty of Medicine, Sohag University, Sohag Governorate, Egypt

Correspondence to: Rasha Abd Elhameed Ali, E-mail: rashaali815@yahoo.com

Received: May 18, 2017; **Accepted:** Jun 07, 2017

ABSTRACT

Background: Violence against woman is a pervasive public health issue. Domestic violence (DV) committed by husbands against their wives is the most common type of violence and has many negative impacts on physical and mental health of women and their children. **Objectives:** The aim of this study is identification of magnitude and determinants of DV among ever married women in Sohag, Egypt. **Materials and Methods:** A cross-sectional survey was conducted in 3 months duration from March to May on a sample of 490 ever married women selected from Sohag city and six nearby villages using self-administered questionnaire. The used questionnaire was consisted of two sections, the first included sociodemographic data of the women and their husbands (age, residence, education, working, and marital status) while the second section assessed exposure to DV in the past 12 months (verbal, emotional, and physical violence). **Results:** The prevalence of DV was 58.1%. Low level of education, being homemakers, husband age more than 40 years, husband-wife age difference more than 10 years, and husband substance abuse were important predictors of DV among the surveyed women. **Conclusion:** This study uncovers exposure of high percentage of women in Sohag, Egypt, to several types of DV and its negative impacts on their health. It also highlights the need for empowerment of women by education, public awareness, and social support legislations.

KEY WORDS: Domestic Violence; Determinants; Ever Married Woman


INTRODUCTION

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.”^[1] Domestic violence (DV) against women is a significant social and public health problem globally.^[2] Furthermore, it is found to be the most frequent and pervasive form of violence committed against women.

Results of multi-country study of DV conducted by the World Health Organization reported exposure of 15-71% of the surveyed women to physical or sexual violence by a husband or a partner.^[2] In Egypt about 33-35% of the Egyptian women had been beaten by their husbands according to the Ethiopia Demographic and Health Survey.^[3]

Understanding the current status and determinants of DV is crucial for proper planning and implementation of intervention programs to reduce this act, especially when considering public view of DV as a family matter. Several partner and woman characteristics had been related to DV as young age at marriage, low education, financial dependency, low socioeconomic status, child maltreatment and family troubles, and alcohol or drug use.^[4,5]

DV against women which represents significant violation of human rights has many negative impacts on physical

Access this article online	
Website: http://www.ijmsph.com	Quick Response code
DOI: 10.5455/ijmsph.2017.0513307062017	

International Journal of Medical Science and Public Health Online 2017. © 2017 Rasha Abd Elhameed Ali and Rania Ahmed Radwan. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

and mental health of women and their children including diminished self-esteem, injuries, chronic pain, disability, morbidity, and mortality of victims.^[6] Moreover, many studies showed that these negative health consequences are lasting.^[1] The aim of the study is to identify the prevalence and determinants of DV against woman in Sohag governorate.

MATERIALS AND METHODS

Study Design

This is a community-based, cross-sectional survey conducted to determine magnitude and determinants of DV against women by their husband in Sohag, Egypt. Participants were randomly selected from Sohag city and six randomly selected nearby villages. This study was conducted in 3 months duration from March to May 2017.

Setting

Sohag governorate on the Eastern Nile Bank is an agricultural governorate that includes 12 districts and 51 villages. More than 4.6 million inhabitants reside in this governorate with male:female ratio of 1.1:1.

Study Population and Sampling

Using OpenEpi program, the sample size was calculated to be 300 using reported the prevalence of DV of 33%,^[3] setting power as 80%, and confidence interval and margin of error at 95% and 5%, respectively. However, we increased the sample size to 490 ever married women for proper representation of the target population.

Based on the distribution of Sohag population in rural and urban areas, 303 participants were selected from 6 randomly selected villages nearby Sohag city and 187 women were selected Sohag city. Women were selected randomly from those attending rural health-care units in the selected villages and both Sohag University Hospital and Sohag General Hospital in Sohag city. The sample was gathered using systematic random sample where every fifth woman coming to the selected health-care centers was asked to participate in the study until the sample was gathered.

Eligible criteria included: Being an ever-married woman, from Sohag governorate, whose age ranging from 14 to 65 years and willingness to participate in the study.

Data Collection Procedure

Collection of data was conducted through personal interviews with the participants before leaving health-care centers using pre-designed questionnaire. After explaining the aim of the study and ensuring confidentiality of the data, participants who could read and write filled the anonymous questionnaires

by themselves while the investigator filled it for those who were illiterate.

Study Instrument

We used a self-administered questionnaire which comprised two sections. The first section involved data about sociodemographic characteristics of the participant (such as age, residence, education, working status, age at marriage, number of children, duration of marriage, and type of the house whether private house or with the family of the husband). Husband characteristics were also included in this section such as age, working state, occupation, and drug abuse. The second section included items related to occurrence of physical, verbal, and psychological violence exerted by the husband and its causes. Definition of physical violence was set as applying a hit, a slap, punching, choking, pushing, or any type of contact that result in physical injury to the victim. Emotional violence was defined as threatening, intimidating, undermining, the woman's self-worth or self-esteem, or controlling her freedom, whereas verbal violence was defined as screaming at her or insulting her. All types of violence were determined as occurring in the past 12 months.^[7]

Ethical Consideration

Conduction of the current study was approved from the Scientific Research Ethical Committee of the Faculty of Medicine, Sohag University. Informed consent was obtained from each participant during data collection after explaining the aim of the study ensuring confidentiality of the data.

Statistical Analysis

We used SPSS software for Windows (version 20, Chicago, IL, USA) for statistical analysis where sample characteristics were presented using the mean and the standard deviation for continuous variables and percentage for categorical variables. Chi-square test for independence and logistic regression analysis were used to assess the differences in the prevalence of DV by women sociodemographic factors and other husband-related characteristics. $P < 0.05$ was used as the definition of statistical significance.

RESULTS

We successfully enrolled 490 ever married woman in this study, their age ranged from 17 to 65 years with a mean of 34.7 ± 1.01 years. 61.8% (303) of the surveyed women were residing in rural areas, whereas 38.2% (187 women) were residing in urban areas. Regarding their education, 204 (41.6%) were illiterate while 199 (40.6%) held university degree, 55 (11.2%) completed secondary school, and 32 (6.5%) completed primary school. 305 (62.2%) of the

surveyed women were homemakers, whereas 185 (37.8%) were working women. As regard their marital, 385 (78.6%) of the surveyed women were married, whereas 68 (13.9%) were divorced and 37 (7.6%) were widows.

Figure 1 displays the prevalence of DV (physical, verbal, and psychological violence) among the studied ever-married women in Sohag, Egypt. The most common type of violence was verbal violence reported by 57.8% (285) of the participants followed by psychological violence among 51.8% (254). Physical violence was experienced by 196 (40%) women. We should mention that those suffer from physical violence also suffer from the other two types of violence.

Table 1 shows distribution of the sociodemographic characteristic of the surveyed women by the status of DV against them. There was no statistically significant association between DV and woman's age, residence, and age at marriage ($P = 0.2, 0.1$ and 0.7), respectively. However, statistical analysis revealed very high significant association between DV and educational level of the woman, working status ($P = 0.002$), and marital status ($P < 0.001$).

Table 2 presents distribution of DV against women as regard husband and marriage characteristics. No significant association was found between DV and duration of marriage,

presence of children, and type of the house in which they live ($P > 0.05$). Statistically significant association was found between DV and age of the husband more than 40 years ($P = 0.02$). More than 68% of those reported physical DV had husband-wife age difference of 10 years or more compared to 31.2% of those who had age difference of <10 years and the difference was statistically significant ($P = 0.01$). Very high statistically significant relation was also found between DV

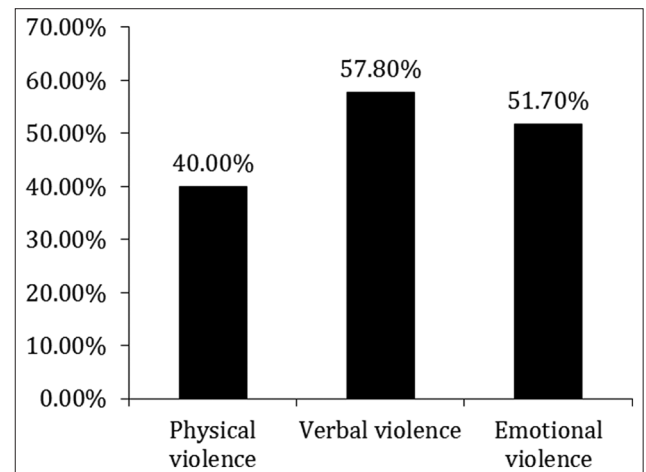


Figure 1: Prevalence of DV (physical, verbal, and emotional violence) among the studied ever married women in Sohag, Egypt

Table 1: Distribution of women sociodemographic characteristic by the status of DV against them

Characteristics	Total	No DV 205 (41.9%)	DV 285 (58.1%)	P value
Current age <i>n</i> (%)				
<20 years	21	5 (34.8)	16 (76.2)	0.2
20-35	203	90 (44.6)	113 (55.4)	
35-50	227	92 (40.5)	135 (59.5)	
More than 50	39	18 (46.2)	21 (53.8)	
Residence <i>n</i> (%)				
Rural	303	118 (38.9)	185 (61.1)	0.1
Urban	187	87 (46.5)	100 (53.5)	
Education <i>n</i> (%)				
Illiterate	204	76 (36.8)	129 (63.2)	0.002
Primary and preparatory	32	8 (25)	24 (75)	
Secondary	55	18 (33.3)	36 (66.7)	
College or university	199	103 (51.8)	96 (48.2)	
Working status <i>n</i> (%)				
Not working	305	98 (32.1)	207 (67.9)	0.000
Working	185	107 (57.9)	78 (42.1)	
Marital status <i>n</i> (%)				
Married	385	192 (49.9)	193 (50.1)	0.000
Divorced	68	0 (0)	68 (100)	
Widow	37	13 (35.1)	24 (64.9)	
Age at marriage (years) <i>n</i> (%)				
≤20	276	117 (42.3)	189 (57.7)	0.7
>20	214	88 (41.1)	126 (58.9)	

DV: Domestic violence

Table 2: Distribution of DV against women as regard husband and marriage characteristics

Characteristics	Total	No DV 205 (41.9%) n (%)	DV 285 (58.1) n (%)	P value
Age of the husband				
<40 years	168	83 (49.4)	85 (50.6)	0.01
More than 40 years	321	122 (38)	199 (62)	
Husband-wife age difference				
<10 years	330	155 (46.9)	175 (53.1)	0.01
More than 10 years	160	50 (31.2)	110 (68.8)	
Husband working status				
Not working	101	35 (34.6)	66 (65.4)	0.05
Working	389	170 (43.8)	219 (55.2)	
Husband substance abuse				
Yes	16	0 (0)	16 (100)	0.001
No	474	205 (43.2)	269 (56.8)	
Duration of marriage (years)				
<10	185	72 (38.9)	118 (61.1)	0.2
10-19	175	83 (46.5)	92 (52.5)	
20-30	130	51 (39.3)	79 (60.7)	
Presence of children				
No	43	23 (53.5)	20 (46.5)	0.4
Yes	447	182 (40.7)	265 (59.2)	
Type of house				
Private house	240	115 (47.9)	125 (52.1)	0.3
With the husbands family	250	150 (60)	100 (40)	

DV: Domestic violence

drug abuse by the husband as 100% of those reported drug abuse by the husband experienced DV compared to 57% of those whose husbands were not drug addicts ($P = 0.001$).

On univariate logistic regression analysis of predictors of DV against women by their husbands (Table 3) results reported that being homemaker, being divorced, husbands age older than 40 years, and husband-wife age difference more than 10 years were strong predictors of DV among the studied participants.

Table 4 notes the causes and consequences of DV experienced by the surveyed women. Money was the cause of DV committed against 57.4% (187) of the women, whereas no cause was determined by 38% (178) of the women. Physical impacts of DV included contusions or wound in 110 (38%), fracture arm or leg in 15 (5%), black eye, burns, and teeth removal.

DISCUSSION

Violence against women represents the worst consequence of socioeconomic, cultural, and political gender inequalities in our world. The prevalence of DV among the surveyed women in the present study is 58.1%. Although it is higher than results of Egypt Demographic and Health Survey

Table 3: Univariate logistic regression analysis about predictors of DV against women by their husbands

Characteristics	OR (CI 95%)	P value
Age of the woman	0.8 (0.6-1.1)	0.3
Residence	0.9 (0.6-1.6)	0.9
Education	1.06 (0.9-1.2)	0.4
Working status	0.4 (0.3-0.6)	0.000
Marital status	2.8 (1.8-4.3)	0.000
Age at marriage	1.1 (0.7-1.7)	0.4
Age of husband	2.6 (1.5-4.5)	0.01
Husband wife age difference	0.5 (0.3-0.7)	0.001
Husband working status	1 (0.5-1.8)	0.9
Duration of marriage	0.8 (0.6-1.1)	0.4
Presence of children	1.8 (0.5-6.1)	0.3
Housing status	1.3 (0.8-1.9)	0.2

OR: Odds ratio, CI: Confidence interval, DV: Domestic violence

2014 (33%),^[3] it is comparable to that reported in Zagazig^[8] and Minia^[9] governorates (62.2% and 57.4%, respectively). In Alexandria, a reported prevalence of 35.5%^[10] and 77.%^[11] was also found. Major variation between the prevalence of DV found by these studies and that reported by DHS may be partially explained by the fact that tools used for measuring DV in these studies were not comparable to the questionnaire used in DHS. Our findings agree also with DV prevalence

Table 4: Characteristics of DV committed against the surveyed women by their husbands

Characteristics	n (%)
Causes of the violence	
Money	178 (57.4)
Children	27 (8.7)
Housework	23 (5.4)
Other	75 (24.2)
Not determined	187 (38)
Consequences of the physical violence	
Contusions or wounds	110 (38.7)
Fracture arm or leg	15 (5)
Black eye	5 (1.7)
Burns	2 (0.7)
Teeth removal	2 (0.7)
Not determined	150 (53.2)

DV: Domestic violence

in turkey (67.7%)^[12] and Iran (62%).^[13] The high rate of DV found in this study is expected in a traditional community like Sohag governorate, where men are considered superior to women and sociocultural and economic context support male authority and control over women.

Interestingly, considerable variation in DV prevalence between countries and within the same country, was reported by many studies, in Saudi Arabia, the prevalence of DV ranged from 20%^[14] to 100%.^[15] Moreover, the WHO multi-country study showed that the lifetime prevalence of DV ranged from 15% in Japan to 71% in Ethiopia (average 47%).^[16] This can be explained by the absence of consistent definition of DV, variable religious belief, different cultural context, and variation in design of the study, participants recruitment, and duration.^[16] we found that the most common type of DV reported by the surveyed women was the most devastating, verbal violence followed by emotional and physical violence (58.2%, 51.8%, and 40%, respectively). These results are in line with many studies.^[12,17,18] Indicating major suffering of the affected woman.

Studying sociodemographic characteristics of the surveyed women revealed no significant association between DV and current age of the woman or age at marriage in agreement with^[5,19-21] although these findings are inconsistent with^[8,14] concerning current age of the participants and^[13,22] concerning age at marriage. Moreover, we found no significant association between DV and place of residence, as according to our results more than half the surveyed women resided in both urban and rural areas reported exposure to DV. These findings are consistent with.^[8,14]

A growing body of literature,^[5,8-11,13,15,19-22] support our findings that low level of education of the participants was significantly associated with DV. Our results showed that

more than two-thirds illiterate ones or those having primary education only reported exposure to DV compared to less than half those having university degree. This finding was logically expected as education provides social empowerment through self-confidence and providing possibility of paying job that help women to be independent and determine and refuse violence.

In agreement with,^[8,10,13,14] DV was found to be significantly associated with working status of the women, additionally, results of univariate logistic regression analysis showed that risk of DV was 2.8 times higher among homemakers than working women. This is because financial independency of the woman is supposed to be protective against DV, moreover, these women who were dependent on their husband for their basic demands, usually accept and tolerate the violence committed against them. However, our results are inconsistent,^[5,20-22] where economic independency and presence of ownership were linked to DV and not the opposite which may be explained by different socioeconomic context in which these studies were conducted.

Our results showed that significantly higher percentage of divorced women reported exposure to DV than married women or widows (100% vs. 50%). These results are in line,^[11] who found that divorce or separation was significantly associated with spousal violence.

As regard husband characteristics, we found that DV was significantly more prevalent among women whose husbands' age was older than 40 years and these findings are in concordance.^[5,8,14,22] This can be attributed to changing women status in the society and improvement of public awareness about DV which is manifested more among younger men. In agreement,^[14] we found that a husband-wife age difference more than 10 years was significantly associated with DV which was confirmed by results of univariate regression analysis. As regard working status of the husband, several previous studies^[13,20-22] failed to link DV to working status of the husband, similar to our results. These findings are quit strange, especially when considering that money as a cause of DV was reported by more than half the abused women. However, this may indicate controlling attitude of the husbands toward their wives rather than financial constrains. In keeping with previous findings,^[8,11,14] we found that DV was more prevalent among women whose husbands were substance abusers. This is because substance abuse excess expenses negatively affect family income and psychological stability of the person and eventually erupt violent behavior.

Several previous studies enforced our results concerning the absence of significant relation between DV and type of the house and presence of children^[5-14] and duration of marriage.^[21] although^[13-23] found that DV was significantly associated with duration of marriage.

As regard the major causes of violence and in partial agreement,^[14] money was the most frequent cause of fights between the abused women and her husband (57.4%). While no cause was retrieved by more than 38% of the participants. In agreement,^[14,24] DV experienced by the surveyed women had many negative consequences on the health status that included contusions or wounds (the most frequent physical impact in 38.7% of the victims), fracture arm or leg (5%), which confirmed the negative impacts of DV on physical health of the women.

Strengths and Limitations

Using validated questionnaire for DV identification among the surveyed participants is one of the strengths of the current study in addition to being the first study conducted for the identification of prevalence and determinants of DV in Sohag governorate.

Limitations of the study include using cross-sectional study design which hinders our ability to draw causal inference. Moreover, self-report nature of the assessment may have led to under or overestimation of the true prevalence of DV in Sohag governorate.

CONCLUSION

The prevalence of DV in the current study is high (58.1%). Several woman and husband characteristics were linked to DV including, low level of education, being homemaker, husband age more than 40 years, husband-wife age difference more than 10 years, and husband substance abuse. Physical violence was reported by 40% of women with associated negative health impacts in about 46% of them which included fracture arm or leg indicating the importance of improvement of public awareness about woman rights and status in the community and urgent need of social support of the victims of DV.

REFERENCES

1. Bohra N, Sharma I, Srivastava S, Bhatia MS, Chaudhuri U, Parial S, et al. Violence against women. *Indian J Psychiatry*. 2015;57 Suppl 2:S333-8.
2. World Health Organization. WHO Multi Country Study on Women's Health and Domestic Violence against Women. Initial Results on Prevalence, Health Outcomes and Women's Responses. Geneva, Switzerland: WHO; 2005. Available from: http://www.who.int/gender/violence/who_multicountry_study/en/. [Last cited on 2015 Apr 15].
3. Ministry of Health and Population (Egypt), El-Zanaty and Associates (Egypt), and ICF International. Egypt Demographic and Health Survey 2014. Cairo, Egypt and Rockville, MD, USA: Ministry of Health and Population and ICF International; 2015.
4. Al-Faris H, Al-Faris E, Nagma N, Jamal A, AlQuaiz AM, Al-Thebaity R, et al. A history of childhood maltreatment among spouses predicts violence against women. *Ann Saudi Med*. 2013;33:595-600.
5. Fageeh WM. Factors associated with domestic violence: A cross-sectional survey among women in Jeddah, Saudi Arabia. *BMJ Open*. 2014;4:e004242.
6. World Health Organization. Violence against women: Intimate partner and sexual violence against women (Fact Sheet No. 239). (2013a). Available from: <http://www.who.int/mediacentre/factsheets/fs239/en/>. [Last accessed on 2017 Apr 22].
7. United States Department of Justice. (2014), Domestic Violence. The United States Department of Justice. Office on Violence against Women. National Domestic Violence Hotline, National Center for Victims of Crime, and Womens Law.org.
8. Fahmy HH, El-Rahman SI. Determinants and health consequences of domestic violence among women in reproductive age at Zagazig district, Egypt. *Egypt Public Health Assoc*. 2008;83(1):87-106.
9. Habib SR, Abdel Azim EK, Fawzy IA, Kamal NN, El Sherbini AM. Prevalence and effects of violence against women in a rural community in Minia governorate, Egypt. *J Forensic Sci*. 2011;56(6):1521-7.
10. Guimei M, Fikry FE, Esheiba OM. Patterns of violence against women in three communities in Alexandria, Egypt. *MCN Am J Matern Child Nurs*. 2012;37(5):331-8.
11. Mamdouh HM, Ismail HM, Kharboush IF, Tawfik MM, El-Sharkawy OG, Abdel-Baky M, et al. Prevalence and risk factors for spousal violence among women attending health care centres in Alexandria, Egypt. *East Med Health J*. 2012;18:1118-26.
12. Izmirli GO, Sonmez Y, Sezik M. Prediction of domestic violence against married women in southwestern Turkey. *Int J Gynaecol Obstet*. 2014;127(3):288-92.
13. Mohamadian F, Hashemian A, Bagheri M, Direkvand-Moghadam A. Prevalence and risk factors of domestic violence against Iranian women: A cross-sectional study. *Korean J Fam Med*. 2016;37:253-8.
14. Barnawi FH. Prevalence and risk factors of domestic violence against women attending a primary care center in Riyadh, Saudi Arabia. *J Interpers Violence* 2015. pii: 0886260515587669.
15. Abo-Elfetoh NM, Abd El-Mawgod MM. Violence against wives: A silent suffering in northern Saudi community. *J Egypt Public Health Assoc*. 2015;90:87-93.
16. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH. Prevalence of intimate partner violence: Findings from the WHO multi country study on women's health and domestic violence. *Lancet*. 2006;368:1260-9.
17. Afifi ZE, Al-Muhaideb NS, Hadish NF, Ismail FI, Al-Qeamy FM. Domestic violence and its impact on married women's health in Eastern Saudi Arabia. *Saudi Med J*. 2011;32:612-20.
18. Özcan NK, Günaydin S, Çitil ET. Domestic violence against women in Turkey: A systematic review and meta-analysis. *Arch Psychiatr Nurs*. 2016;30(5):620-9.
19. Gokler ME, Arslantas D, Unsal A. Prevalence of domestic violence and associated factors among married women in a semi-rural area of western Turkey. *Pak J Med Sci* 2014;30(5):1088-93.
20. Owusu Adjah ES, Agbemaflle I. Determinants of domestic violence against women in Ghana. *BMC Public Health* 2016;16:368.
21. Sapkota D, Bhattarai S, Baral D, Pokharel PK. Domestic

- violence and its associated factors among married women of a village development committee of rural Nepal. *BMC Res Notes* 2016;9:178.
22. Kargar Jahromi M, Jamali S, Rahmanian Koshkaki A, Javadpour S. Prevalence and Risk Factors of Domestic Violence Against Women by Their Husbands in Iran. *Glob J Health Sci.* 2015;8(5):175-83.
 23. WHO. Prevalence and Health Effects of Intimate Partner Violence and Non-partner Sexual Violence against Women. Geneva, Switzerland: WHO, Department of Reproductive Health and Research (RHR); 2013.
 24. Lafta RK, Al-Nuaimi MA. Physical violence against women and its effect on child morbidity. *J Arab Board Health Spec.* 2011;12:41-8..

How to cite this article: Ali RAE, Radwan RA. Magnitude and determinants of domestic violence against ever married women in Sohag, Egypt. *Int J Med Sci Public Health* 2017;6(8):1285-1291.

Source of Support: Nil, **Conflict of Interest:** None declared.