

Brief Communication

Prevalence of intimate partner violence and its associated risk factors among Saudi female patients attending the primary healthcare centers in Western Saudi Arabia

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ABSTRACT

Objectives: To estimate the prevalence of intimate partner violence (IPV) among female patients, age 18-60 years, attending primary health care centers (PHCCs) and to measure its determinants, and reporting behavior.

Methods: A cross-sectional study design using validated, translated, and self-administered questionnaire among 497 Saudi female patients attending PHCCs in Taif, Kingdom of Saudi Arabia (KSA) from January to February 2015 was employed. A 2-stage probability sampling was adopted for selection of PHCCs in the first stage, and then participants in the second stage.

Results: The estimated prevalence of IPV during the last year was 11.9%. Predictors of IPV related to abused women included divorced status and divorced parents; while those related to abusers (husbands) included widowed parents, exposure to violence in childhood, and alcohol or drugs addiction. Most of the abused wives (56%) talked regarding their IPV to their families, their husbands' families (15.2%), or their friends (11.8%); while only a minority (3.3%) complained to the police or to a judge, and no one reported this to a family physician, or to women protection agency.

Conclusion: One out of 10 women is a victim of IPV in Taif, KSA. Intimate partner violence is significantly associated with a number of victim and abuser-related psychosocial factors, the detection of which might help screening for individuals at risk.

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Intimate partner violence (IPV) is defined as any behavior within an intimate relationship that causes physical, sexual, or psychological harm. The present study examines IPV within the context of marriage,¹

and focuses only on physical and psychological violence. Sexual violence, which is an important type of IPV was not assessed due to the sensitivity of the issue, and the expectation that there would be few instances to be reported. Intimate partner violence has major short- and long-term social, mental, and physical wellness effects.² Nationwide surveys in Canada and the United Kingdom found that approximately 25% of women experienced IPV.³ In some Arab countries, IPV is still not properly investigated despite its relatively high prevalence.⁴ It is difficult to calculate the financial burden of IPV on the health system,⁵ but some studies estimate the cost to be from 1.7 - 10 billion US\$ per year in the US,⁶ and approximately 400 million Swiss Francs in Switzerland.⁷ Many risk factors are associated with IPV, such as young age, low socioeconomic status, marital conflicts, a past history of violence in childhood, alcohol and drug addictions,^{1,6} disempowerment of women, stress, and jealousy.¹ Intimate partner violence is a significant public health issue that is associated with serious health outcomes, including depression, suicide attempts, and death.¹ Eldoseri⁸ conducted a cross-sectional study in Jeddah, Kingdom of Saudi Arabia (KSA) and interviewed women attending the primary health care centers (PHCCs), found that the prevalence of physical IPV was 45.5% that was significantly associated with husbands having alcohol or drug addictions, exposure to violence during childhood, and unemployment status. Al-Faris et al⁹ conducted a study in Riyadh, KSA on 222 women at a teaching hospital and found that 12.2% of them experienced lifetime physical abuse, which was significantly associated with unemployment, past exposure to violence, and living in rented houses. In Iraq, Al-Atrushi et al¹⁰ conducted a cross-sectional study at 2 community hospitals and found 58% of visiting women experienced lifetime IPV with physical violence accounting for 38.9%, and sexual violence accounting for 21.1% of the IPV. Due to the discrepancy in the prevalence rate of IPV across the country, a common simple measure is needed to assess and compare IPV in future studies. Therefore, the current study was conducted to measure IPV and its associated risk factors among female patients attending PHCCs in Taif, KSA, and to assess wives' reporting behavior.

Methods. Design and setting. A cross-sectional study was conducted from January until February 2015 among Saudi female patients attending PHHCs in Taif, KSA, who were 18-60 years-old, currently married, divorced or widowed, and able to read and write. Ethical approval

was obtained from the research ethical committee at King Abdulaziz University and the Directorate of Health Affairs in Taif, KSA. Confidentiality and the right to withdraw from the study were explained, and all women were provided referral cards that contained contact numbers of social services and the women's protection agency in Taif.

Instruments. The survey instrument consisted of 3 parts. Part I contained questions regarding the basic characteristics of participants and their husbands. Part II contained the HITS, a structured, self-administered questionnaire, which is a valid, reliable, and simple measure,¹¹ that is comprised of 4 questions: "How often does your partner: physically hurt you, insult you or talk down to you, threaten you with harm, and scream or curse at you?" Patients responded to each of these items on a 5-point Likert scale: 1 - never; 2 - rarely; 3 - sometimes; 4 - fairly often; and 5 - frequently. The scores range from a minimum of 4 to a maximum of 20, with a score of 11 or more considered a case of IPV.^{11,12} The HITS questionnaire was originally developed in English and designed to be used in outpatient clinical settings. The investigator translated the questionnaire into Arabic, through forward and backward translation, using professional translators and following published guidelines.^{13,14} Part III, which measured IPV reporting behaviors was adopted from a World Health Organization report.¹

Sample size and sampling. A sample size of 340, based on a 33% IPV prevalence, was calculated,^{8,9,12} and then increased to 500 to account for anticipated missing data and refusal to participate. Two-stage probability sampling was conducted. First stage, 5 PHCCs was selected by simple random selection, and the second stage, 100 subjects were selected from each of the chosen 5 centers using systematic random sampling.

Data analysis. Analyses were carried out using Stata software version 13.1 (StataCorp LP, College Station, TX, USA).¹³ Descriptive analyses were presented using frequencies with percentages for qualitative variables, and means with standard deviations for quantitative variables. The chi-square and Fisher's exact tests were used for comparisons between 2 qualitative variables, while Student's t-test and the Mann-Whitney test were used to test the differences between means. Stepwise logistic regression using 95% confidence interval (CI) was used to identify predictors of IPV. Statistical significance was set at $\alpha=0.05$ with 2-tail probability.

Results. The study sample's age ranged from 18-60 years with a mean of 33.9 ± 8.4 years. Most of the

women were married. Marriage duration ranged from one month to 40 years with a mean of 11.4 ± 8.9 years. Nearly half of them were categorized as having secondary school, or lower level of education. The prevalence of IPV in the past 12 months was 11.9% (Table 1). The IPV was significantly associated with being older, divorced, working or ever worked, higher income, divorced parents, and witnessing violence in the family during childhood. The husbands' ages ranged from 20-85 years with a mean of 39.9 ± 10.2 years. Husbands with a low educational level, non-working status, lower income, a history of alcohol or drug abuse, divorced parents, and exposure to violence during childhood were significantly more likely to abuse their wives (Table 2).

Table 3 shows the results of the multiple logistic regression analysis of factors predicting IPV. The predictors were: being a divorced woman; wives' parents being divorced; husband with a widowed parent; husband's exposure to violence in childhood; and husband's addiction to either alcohol or drugs. Goodness of fit was $p=0.1628$. Most of the abused wives

Table 1 - Demographic characteristics of women by intimate partner violence (IPV) status.

Variables	IPV		P-value
	Yes=59 n (%)	No=438 n (%)	
Age, mean \pm standard deviation	36.5 \pm 7	33.6 \pm 8.5	0.012 [†]
Marital status			0.001 [‡]
Married	52 (10.9)	427 (89.1)	
Divorced	6 (60.0)	4 (40.0)	
Widowed	1 (12.5)	7 (87.5)	
Education level			0.507 [‡]
Secondary or below	31 (12.9)	210 (87.1)	
Diploma or above	28 (10.9)	228 (89.1)	
Employment			0.031 [‡]
Working or ever worked	25 (16.7)	125 (83.3)	
Not working (housewife)	34 (90.8)	313 (90.2)	
Monthly income (Saudi Riyals)			0.028 [‡]
≤ 5000	37 (10.4)	319 (89.6)	
5001-10000	9 (11.4)	70 (88.6)	
>10000	11 (23.9)	35 (76.1)	
Marital status of wives' parents			0.008 [‡]
Married	40 (11.2)	316 (88.8)	
Divorced	7 (33.3)	14 (66.7)	
Widowed	12 (10.0)	108 (90.0)	
Wives witnessed violence in family			0.011 [‡]
Yes	15 (20.8)	57 (79.2)	
No	44 (10.3)	381 (89.7)	
Wives exposed to violence in childhood			0.001 [‡]
Yes	13 (26.5)	36 (73.5)	
No	46 (10.3)	402 (89.7)	

*P-value <0.05, †Student t-test, ‡Fisher's exact test

Table 2 - Demographic characteristics of husbands by wives' intimate partner violence (IPV) status.

Variables	IPV		P-value
	Yes = 59 n (%)	No = 438 n (%)	
Age, mean \pm standard deviation	40.5 \pm 9.1	39.8 \pm 10.4	0.640 [†]
Education level[§]			0.006 [*]
Secondary or below	45 (15.1)	253 (84.9)	
Diploma or above	14 (07.0)	185 (93.0)	
Employment[§]			0.007 [*]
Working or ever worked	51 (10.9)	419 (89.1)	
Not working	7 (29.2)	17 (70.8)	
Monthly income (Saudi Riyals) [§]			0.018 [*]
\leq 5000	28 (18.1)	127 (81.9)	
5001-10000	18 (8.4)	197 (91.6)	
>10000	10 (11.1)	80 (88.9)	
Addiction to alcohol or drugs[§]			0.001 [*]
Yes	10 (50.0)	10 (50.0)	
No	49 (10.3)	428 (89.7)	
Polygamy[§]			0.230
Yes	12 (16.0)	63 (84.0)	
No	47 (11.2)	374 (88.8)	
Order of the wives[§]			0.110
First wife	49 (11.2)	390 (88.8)	
Other order	10 (18.5)	44 (81.5)	
Total number of wives (median)	01	01	0.179[‡]
Marital status of husbands' parents[§]			0.001 [*]
Married	23 (7.9)	268 (92.1)	
Divorced	6 (31.6)	13 (68.4)	
Widowed	30 (16.1)	157 (83.9)	
Husbands exposed to violence in childhood[§]			0.00 [*]
Yes	19 (27.9)	49 (72.1)	
No	40 (9.3)	389 (90.7)	

* $p < 0.05$, [†] Student t-test, [‡] Mann-Whitney test, [§] Fisher's exact test**Table 3** - Multivariable logistic regression of intimate partner violence[‡] with associated risk factors.

Variables	OR	P-value	95% CI
Wife's marital status			
Married [†]	1.00	-	-
Divorced	12.49	0.001 [*]	2.65 - 58.7
Widowed	1.17	0.987	0.36 - 20.33
Marital status of wives' parents			
Married [†]	1.00	-	-
Divorced	4.81	0.008 [*]	1.49 - 15.46
Widowed	0.57	0.21	0.23 - 1.38
Marital status of husbands' parents			
Married [†]	1.00	-	-
Divorced	2.07	0.275	0.55 - 7.69
Widowed	2.38	0.024 [*]	1.1 - 5.1
Past husband exposure to violence			
No [†]	1.00	-	-
Yes	4.45	<0.001 [*]	1.95 - 10.15
Addiction to alcohol or drugs			
No [†]	1.00	-	-
Yes	4.89	0.006 [*]	1.57 - 15.19

* $p < 0.05$, [†] reference category, [‡] Yes (n=59) = 1 if HITS score ≥ 11 versus No (n=438) = 0 if HITS score < 11 , OR - odds ratio, CI - confidence interval

(56%) talked with their families regarding IPV, 15.2% talked to their husbands' families, and 11.8% talked to their friends. Only 3.3% told the police or a judge, while no one told a physician or a women's protection agency.

Discussion. Women in the present study tended to be unemployed housewives with low income and financially dependent on their husbands. This is consistent with other studies.^{4,8,15} The current study did not measure IPV perpetrated by the women, although bidirectional IPV results in more serious injuries to women. The reported IPV in the present study was only 11.9%, contrary to higher prevalence rates reported elsewhere.¹⁰ This could be attributed to variation in instruments used, type of intimate violence investigated, study designs, sample size, and selecting only educated women. A true decrease in prevalence could have occurred due to the establishment of first family protection program in KSA in 2004, and national registry for abused cases in 2009,¹⁵ resulting in identifying abused wives at older age in our study. Divorced compared with married or widowed women showed a significantly higher prevalence of IPV. The current study did not find a relationship between level of education and IPV, which is in agreement with previous studies.¹¹

Working women with higher income experienced significantly more IPV than non-working ones, which is inconsistent with other research⁸ and explained by husband's feelings of inferiority and dependence. A divorced wives' parents was significantly associated with being a victim of IPV showing the loss of parental support resulting from marital conflict.¹ Women married to a partner with a low educational level experienced significantly more IPV, similar to what was reported in Fageeh's study.¹⁵ Working husbands practiced significantly less violence against their wives.¹⁵ Alcohol addiction and drug abuse were associated with IPV in our study.¹ Polygamy, number and order of wives were not significantly associated with IPV, which was supported by a previous study.⁸ Similarly, a divorced husbands' parents was significantly associated with IPV showing the effect of parental family conflicts on offspring's future life. The IPV was significantly associated with wives' witnessing violence, exposing to violence themselves, or their husbands within the family during childhood leading to psychological maladaptation of both victims' and abusers' attitudes and behaviors.^{8,9}

The present study has limitations, such as, the potential of information bias/under-reporting resulting from sensitivity of the topic being investigated, as well as selection bias due to inclusion only of literate women, which was a necessary criteria for including women in the study to ensure self-administering of the study instrument.

In conclusion, one out of 10 women is a victim of IPV in Taif, KSA. The IPV is significantly associated with many victim and abuser-related psychosocial factors, the detection of which might help in screening for individuals at risk. Governmental and non-governmental sectors should collaborate to tackle IPV. Studies are needed to explore its geographic variations in KSA using a common measure that allows for comparison across studies. The injuries occurring from bidirectional IPV deserve to be investigated. Future studies are needed as well to analyze the wives' reporting behavior for the purpose of control and prevention.

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References

1. World Health Organization. Violence and Injury Prevention. World report on violence and health. WHO. [Cited 2014 March 1]. Available from: http://www.who.int/violence_injury_prevention/violence/world_report/en/
2. VanderEnde KE, Sibley LM, Cheong YF, Naved RT, Yount KM. Community economic status and intimate partner violence against women in bangladesh: compositional or contextual effects? *Violence Against Women* 2015; 21: 679-699.
3. Bradley F, Smith M, Long J, O'Dowd T. Reported frequency of domestic violence: cross sectional survey of women attending general practice. *BMJ* 2002; 324: 271.
4. 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: 612-620.
5. Shye D, Feldman V, Hokanson CS, Mullooly JP. Secondary prevention of domestic violence in HMO primary care: evaluation of alternative implementation strategies. *Am J Manag Care* 2004; 10: 706-716.
6. Acevedo BP, Lowe SR, Griffin KW, Botvin GJ. Predictors of intimate partner violence in a sample of multiethnic urban young adults. *J Interpers Violence* 2013; 28: 3004-3022.
7. Morier-Genoud C, Bodenmann P, Favrat B, Vannotti M. Violence in primary care: Prevalence and follow-up of victims. *BMC Family Pract* 2006; 7: 15.
8. Eldoseri HM. Intimate partner physical violence against women in Saudi Arabian primary healthcare clinics. Old Dominion University 2012. [Cited 23 February 2014]. Available from: <http://search.proquest.com/docview/1283126946/abstracts/accountid=142908>
9. Al-Faris H, Al-Faris H, Al-Faris E, Naghma N, Jamal A, AlQuaiz AM, et al. A history of childhood maltreatment among spouses predicts violence against women. *Ann Saudi Med* 2013; 33: 595-600.
10. Al-Atrushi HH, Al-Tawil NG, Shabila NP, Al-Hadithi TS. Intimate partner violence against women in the Erbil city of the Kurdistan region, Iraq. *BMC Womens Health* 2013; 13: 37.
11. Awwad J, Ghazeeri G, Nassar AH, Bazi T, Fakhri A, Fares F, et al. Intimate partner violence in a Lebanese population attending gynecologic care: a cultural perspective. *J Interpers Violence* 2014; 29: 2592-2609.
12. Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine (Phila Pa 1976)* 2000; 25: 3186-3191.
13. Gleason JR. dm36: Comparing two Stata data sets. Stata Technical Bulletin 28: 10-13. College Station (TX): Stata Press; 1995. p. 39-43.
14. Sherin KM, Sinacore JM, Li XQ, Zitter RE, Shakil A. HITS: a short domestic violence screening tool for use in a family practice setting. *Fam Med* 1998; 30: 508-512.
15. Fageeh WM. Factors associated with domestic violence: a cross-sectional survey among women in Jeddah, Saudi Arabia. *BMJ Open* 2014; 4: e004242.

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