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Gender difference of knowledge and attitude of primary health care staff towards domestic violence

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KEYWORDS

Domestic violence; Primary care staff; Knowledge; Attitude gender difference **Abstract** *Background:* Cultural and traditional norms in the community can have an impact on gender equity. This can be reflected on attitude of both men and women towards domestic violence against women. Gender differences in knowledge and attitude of medical staff about domestic violence can affect their role dealing with battered women.

Objective: The current study was formulated to compare knowledge and attitude of male and female medical staff about domestic violence against women.

Methods: To achieve this aim, a sample of 1553 health care workers was interviewed out of 2516 allocated for this study with an overall response rate of 61.7%. The target population for this study was all physicians and nurses in the primary health care centers in Kuwait.

Results: The results of the current study revealed that female medical primary health care workers tended to have a higher knowledge score about violence against women than male staff (72.8 + 9.8% compared with 68.6 + 10.3%). They also had a higher overall attitude score than

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males (59.9 + 13.7% compared with 57.8 + 22.4%). Multivariate analysis showed that gender was a significant predictor, after adjusting for other confounding factors, of the overall knowledge, attitude and outcome scores of violence against women. No significant difference was revealed between gender and the barrier domain of violence.

Conclusion: Female health care workers tended to have a better knowledge score about definition of domestic violence against women than male medical staff. Females also tended to accept hitting of wives by their husbands if there was a good reason more than males. There is a need to improve both knowledge and attitude of primary health care workers about domestic violence against women.

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1. Introduction

The term domestic violence describes a continuum of behavior ranging from verbal abuse, through threats and intimidation, manipulative behavior, and physical and sexual assault, to rape and even homicide. Domestic violence has been defined by the World Health Organization as behavior within an intimate relationship that causes physical, sexual, or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse, and controlling behaviors. ^{1,2} One common form of domestic violence is that directed against women. A large population-based survey covering 10 countries conducted by the World Health Organization reported that 15–71% of women had been physically or sexually assaulted by an intimate partner and that approximately half of this proportion was currently experiencing partner violence.³

Domestic violence against women has multiple impacts. In addition to the emotional impact on the victim, it can increase the burden and workload on the medical staff and the whole health care delivery system. This burden can be reduced through effective preventive intervention measures that can be adopted and implemented by the health care staff.^{4,5}

The multiple causes of violence against women, according to the World Health Organization stem from various factors, ranging from those relating to the norms that rigidly define the social roles of men, giving them control and domination over women, to the acceptance of violence as a conflict-resolution strategy. 6 All countries and societies have norms embedded in the culture that may exacerbate gender-based violence. Gender inequalities are ones of these norms.⁷ In the Middle East countries, traditional gender roles are ones that may increase the likelihood of violence against women. Little research in the primary care setting has investigated domestic violence against women in Kuwait, in general, and the gender differences in both knowledge and attitude of medical care staff towards domestic violence against women. Thus, the current study was formulated to compare domains of domestic violence against women between primary health care staff men and women, namely knowledge, attitude, causes, outcomes, and barriers for administering care.

2. Methods

An observational cross-sectional study design was adopted for this study. The study was carried out in the primary health care centers in Kuwait. All physicians and nurses available during the field work of the study in the primary health care centers were the target population of this study. A total of 78 health centers are distributed over five health districts in Kuwait. The total number of health care workers was 2516; out of these, only 1553 agreed to participate in the study with a response rate of 61.7%. The study covered the period January to August 2010. Data were collected over 3 months starting from May to July, 2010.

Data of this study was collected through a specially designed questionnaire. This questionnaire consisted of several sections. The first section dealt with socio-demographic characteristics, including age, sex, number of years in practice, educational qualification, current job, years at current work and salary. The second section included domestic violence domains. Knowledge scale consisted of 23 items divided into four sub-domains namely deprivation (10 items), psychological (4 items), physical (6 items), and sexual relationship (3 items). The attitude scale consisted of 18 questions covering three sub-domains. The first sub-domain dealt with the relationship between partners and consisted of six questions, while the second sub-domain considered hitting wives by their husbands and formed of eight questions, the last sub-domain dealt with management of domestic violence and consisted of three questions. The causes of DV consisted of 14 questions; of these five covered the individual characteristics of perpetrator, two covered the relationship, three dealt with the community factors, and four questions reflected the societal factors including traditions, culture and habits. Another section of the interviewing questionnaire covered the expected outcome of domestic violence. This part consisted of 34 questions classified as follows: physical health (six questions), chronic conditions (five questions), mental health (eight questions), negative health behavior (five questions), reproductive health (seven questions), and fatal outcome (three questions). The last part of the questionnaire covered barriers for administering proper care to battered women. This part included 27 questions, of these eight questions covered social barriers, six covered institutional barriers, eight covered barriers related to health staff, while five questions dealt with barriers related to the victim.

A pilot study was carried out on 60 physicians and nurses (not included in the final study). This study was formulated with the following objectives: test the clarity, applicability of the study tools, accommodate the aim of the work to actual feasibility, identify the difficulties that may be faced during the application, as well as study all the procedures and activities of the administrative aspects. Also, the time of completing the questionnaire was estimated during this pilot study. The necessary modifications according to the results obtained were done, so some statements were reworded. Also, the structure of the questionnaire sheet was reformatted to facilitate data collection. The average interviewing time was 20 min.

A pre-coded sheet was used. All questions were coded before data collection. This facilitates both data entry and verification as well as reduces the probability of errors during data entry. Data were fed to the computer directly from the questionnaire without an intermediate data transfer sheets. The Excel program was used for data entry. A file for data entry was prepared and structured according to the variables in the questionnaire. After data were fed to the Excel program; several methods were used to verify data entry. These methods included the following: simple frequency, cross-tabulation, as well as manual revision of entered data. Percent score was calculated for the total attitude score as well as for each domain of attitude. Before calculating the sum of score; the score of negative questions was reversed. The percent score was calculated as follows: sum of scores multiplied by 100 and divided by number of answered items. The sum was treated to yield a range of 100% with a minimum of zero and a maximum of 100.

All the necessary approvals for carrying out the research were obtained. The Ethical Committee of the Kuwaiti Ministry of Health approved the research. A written format explaining the purpose of the research was prepared and signed by the participants. In addition, the purpose and importance of the research were discussed with the director of the health center.

2.1. Statistical analysis

Before analysis; data were imported to the Statistical Package for Social Sciences (SPSS) which was used for both data analysis and tabular presentation. Descriptive statistical measures were utilized (count, percentage, arithmetic mean, median and standard deviation) as well as analytic ones (χ^2 for qualitative variables and multiple linear regression to reveal predictors of violence domains and test for persistence of gender variable after adjusting for other confounding variables). The level of significance selected for this study was $P \leq 0.05$.

3. Results

Table 1 shows socio-demographic characteristics of studied male and female participants. Males tended to be significantly older than females where 27.9% were aged 50 years and higher compared with 13.9% of females, while those aged between 30 and 40 years were more likely encountered among women (53.5%) than men (38.5%). Both nationality and marital status of men and women did not differ significantly. The majority of men were physicians (59.7%) while 72.9% of women were working as nurses. Males tended to have a significantly higher qualification degree (43.9% compared with 23.8%), earn more than 1000 KD per month (49.9% compared with 24.2%) and spent more than 20 years at the current job (21.4% compared with 13.0%).

Table 2 portrays percentage score of knowledge, attitude, causes, health outcome of domestic violence, and barrier for providing proper care (arithmetic mean, standard deviation, and median of percent score). Women tended to have significantly higher knowledge about violence definition than men $(72.8 \pm 9.8\%$ compared with $68.6 \pm 10.3\%$, P < 0.001). Significant differences are observed for deprivation neglect $(55.3 \pm 17.3\%)$ compared with $47.2 \pm 15.5\%$, P < 0.001) and psychological $(72.9 \pm 24.4\%)$ compared with 68.0 ± 10.000

Table 1 Socio-demographic characteristics of male and female participants.

Character	Male		Femal	Female	
	No.	%	No.	%	_
Age (years)					
< 30	85	19.1	221	19.9	< 0.001*
30-39	181	38.5	594	53.5	
40-49	64	14.4	140	12.6	
≥50	124	27.9	154	13.9	
Nationality					
Kuwaiti	84	18.9	248	22.4	0.135
Non Kuwaiti	360	81.1	861	77.6	
Marital status					
Single	73	16.4	149	13.4	0.126
Married	371	83.6	960	86.6	
Job					
Physician	265	59.7	300	27.1	< 0.001*
Nurse	179	40.3	809	72.9	
Qualification					
Bachelor degree	249	56.1	845	76.2	< 0.001*
Higher qualification	195	43.9	264	23.8	
Years at work					
< 10	202	45.5	552	49.8	< 0.001*
10-19	147	33.1	413	37.2	
≥20	95	21.4	144	13.0	
Income (KD)					
< 1000	223	50.1	841	75.8	< 0.001*
1000–1999	191	43.1	173	15.7	
≥2000	30	6.8	95	8.5	
Total	444	100.0	1109	100.0	
$\overline{*}$ Significant, $P < 0.0$	$5, \chi^2$ tes	st.			

26.4%, P = 0.001) aspects. Women also, tended to agree on hitting the wife by her husband if he had a reason for this (72.8 \pm 21.4% compared with 69.7 \pm 21.7%, P = 0.010).

 $(72.8 \pm 21.4\% \text{ compared with } 69.7 \pm 21.7\%, P = 0.010).$ Men tended to have higher scores on causes of violence domain yet, significant differences could only detected for community causes (66.6 \pm 25.5% compared with 6.7 \pm 26.3%, P = 0.041). On the other hand women were more aware about the health outcomes of domestic violence against women with significant differences only for reproductive health outcomes $(76.39 \pm 31.4\% \text{ compared with } 70.9 \pm 33.9\%, P < 0.001)$ fatal outcomes $(76.8 \pm 35.3\%)$ compared with $71.7 \pm 37.6\%$, P = 0.007). Men significantly identified barriers related to the victim (89.6 \pm 22.5% compared with $84.7 \pm 27.3\%$, P = 0.003) and barriers related to the health $(78.2 \pm 24.2\%)$ compared with $71.7 \pm 28.3\%$ P < 0.001) while women had a significantly higher score for social barriers (76.2 \pm 28.6% compared with 75.4 \pm 23.9%, P = 0.006).

Table 3 portrays multiple linear regression using the total score of each violence domain percent score as a dependent variable. Gender proved to be a significant predictor of knowledge, attitude and outcome scores after adjusting for the other confounding variables. Females tended to have higher percent scores than males. In addition, nursing job, with a majority of

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Domains ^{\$}	Males	Females	P
Knowledge (violence definition)			
 Deprivation/neglect (K1) 	$47.2 \pm 15.5 (45.0)$	$55.3 \pm 17.3 (55.0)$	< 0.001*
- Psychological (K2)	$68.0 \pm 26.4 (75.0)$	$72.9 \pm 24.4 (75.0)$	0.001*
- Physical (K3)	$94.2 \pm 9.0 \ (100.0)$	$93.2 \pm 10.0 (100.0)$	0.259
- Sexual (K4)	$89.4 \pm 11.5 (91.7)$	$90.2 \pm 10.6 (91.7)$	0.314
Total knowledge score	$68.6 \pm 10.3 (68.5)$	$72.8 \pm 9.8 \ (72.8)$	< 0.001*
Attitude toward violence			
- Relationship between partners (A1)	$39.3 \pm 16.0 (37.5)$	$44.1 \pm 15.4 (45.8)$	< 0.001*
- A man have a reason to hit his wife (A2)	$69.7 \pm 21.7 (71.9)$	$72.8 \pm 21.4 (75.0)$	0.010*
- management of domestic violence (A3)	$59.2 \pm 16.9 (56.3)$	$58.4 \pm 20.3 (62.5)$	0.992
Total attitude score	$57.2 \pm 13.2 (56.9)$	$59.9 \pm 13.7 (61.1)$	< 0.001*
Causes of violence			
 Individual perpetrator (C1) 	$60.8 \pm 22.4 (65.0)$	$54.6 \pm 28.1 \ (60.0)$	0.001^*
- Relationship (C2)	$62.6 \pm 23.7 (62.5)$	$62.7 \pm 27.9 (75.0)$	0.357
- Community (C3)	$66.6 \pm 25.5 (75.0)$	$63.7 \pm 26.3 (66.7)$	0.041^*
- Society (C4)	$58.5 \pm 25.5 (62.5)$	$59.7 \pm 28.9 (62.5)$	0.215
Total causes score	$61.6 \pm 19.6 (64.3)$	$59.2 \pm 23.3 \ (64.3)$	0.162
Health outcome of violence			
– Physical health (O1)	$70.7 \pm 31.7 (83.3)$	$76.7 \pm 28.4 (83.3)$	0.001*
- Chronic conditions (O2)	$70.5 \pm 33.1 (80.0)$	$71.2 \pm 33.2 (80.0)$	0.488
– Mental health (O3)	$84.5 \pm 27.8 \ (100.0)$	$84.9 \pm 26.3 (100.0)$	0.976
 Negative health behavior (O4) 	$74.5 \pm 32.2 \ (80.0)$	$76.6 \pm 33.6 (80.0)$	0.848
 Reproductive health (O5) 	$70.9 \pm 33.9 (85.7)$	$76.9 \pm 31.4 (100.0)$	< 0.001*
- Fatal outcomes (O6)	$71.7 \pm 37.6 (100.0)$	$76.8 \pm 35.3 \ (100.0)$	0.007^{*}
Total outcome score	$74.6 \pm 27.2 (82.4)$	$77.4 \pm 24.1 \ (85.3)$	0.221
Barriers for administering care			
– Social barriers (B1)	$75.4 \pm 23.9 (81.3)$	$76.2 \pm 28.6 (87.5)$	0.006^*
– Institutional barriers (B2)	$81.9 \pm 27.1 \ (100.0)$	$77.9 \pm 29.9 \ (100.0)$	0.063
- Barriers related to health staff (B3)	$78.2 \pm 24.2 (87.5)$	$71.7 \pm 28.3 (75.0)$	< 0.001*
- Barriers related to the victim (B4)	$89.6 \pm 22.5 \ ()100.0$	$84.7 \pm 27.3 \ (100.0)$	0.003*
Total barriers score	$80.3 \pm 19.8 (85.2)$	$76.8 \pm 23.7 (85.2)$	0.097

 $Mean \pm SD$ (median) are presented.

Significant, P < 0.05 (Mann Whitney Test).

Table 3 Significant predictors of violence domain scores, results of stepwise linear multiple regression model.								
Predictor	Knowledge	Attitude	Causes	Outcomes	Barriers			
Gender	5.728	3.783	-	4.781				
Age	_	0.300	-	-0.210	-			
Nationality	_	-2.268	-	-	_			
Marital status	-1.618	-	-	_	-			
Job	-4.552	-2.330	-12.289	-8.090	-8.081			
Years at work	_	-0.388	-	_	0.149			
Constant	72.226	53.920	79.979	89.358	89.360			

women, is a significant predictor for all types of violence domains.

4. Discussion

Domestic violence against women is considered as a serious human rights violation and an important public health problem that impacts on the whole community.⁵ Several studies in developed countries revealed high rates of domestic violence against women.^{8,9} In developing countries, where families have

strong ties and are cohesive, domestic violence was expected to be uncommon. However, studies of domestic violence in developing countries show a similar prevalence to that in developed countries.^{10,11}

Differences in both knowledge and attitude of male and females medical staff about domestic violence against women may affect their performance and may form an important barrier for screening women for the possibility of violence and even can undermine the support that women needs if they were actually battered.^{12,13} Thus the current study was formulated

[§] K, knowledge; A, attitude; C, cause, O, outcome, B, barrier.

to compare knowledge and attitude of male and female primary health care workers towards domestic violence against women.

The results of this study revealed that males were elder than females and spent more years at the current job. They were also more likely to be physicians, hold a higher educational certificate and earn more money. However, nationality and marital status did not differ significantly by gender. The findings of the present study showed that the clearly defined and severe forms of domestic violence against women, namely physical harm (94.2 \pm 9.0% compared with 93.2 \pm 10.0%) assault $(89.4 \pm 11.5\%)$ sexual compared $90.2 \pm 10.6\%$) were well identified by both men and women with no significant differences between them, while the deprivation/neglect domain $(47.2 \pm 15.5\%)$ compared $55.3 \pm 17.3\%$) and psychological domain (68.0 \pm 26.4% compared with $72.9 \pm 24.4\%$), the less severe forms and poorly defined outcomes, were less recognized. However, the last two domains were more significantly identified by women than men among multiple factors. This finding can be attributed to differences in definition of violence. Some investigators focus on physical violence alone, whereas others include a broader range of abusive behaviors, including emotional and other non-physical abuse. Even these broader definitions of domestic violence fail to capture the complexity of abuse of women by men. 14,15

A finding that seems interesting among the findings of this study; is the high score for both men and women about their agreement for a husband to hit his wife for a good reason, even women had a significantly higher mean score than men $(72.8 \pm 21.4\% \text{ compared with } 69.7 \pm 21.7\%)$. Women also, agreed that a poor relationship between partners might be behind the violence against women (44.1 \pm 15.4% compared with 39.3 \pm 16.0%). A WHO multi-country study reported that 53.3% in the urban and 79.3% of women in the rural area believed that a man had a right to beat his wife under certain circumstances. The various circumstances included were not completing housework adequately, refusing sex, disobeying the husband, or being unfaithful. 16 This may be an indication that women may accept or rationalize violence when it is accepted as the norm by a significant number of people in the community. Attitudes supporting wife beating were revealed to be a risk factor for increased violence against women.¹⁷ Thus, extensive efforts must be performed to change the attitude of both men and women working in the health care system so that their abilities to diagnose and properly manage battered women is not undermined.

Gender proved to be a significant predictor of knowledge and attitude domains of violence against women even after adjusting for other factors, especially job. Even it emerged as a significant predictor for outcome domain after adjusting for other confounding factors, although no significant difference was found by gender regarding this domain in the univariate analysis. This proves that gender difference is an important factor that should be taken into consideration when studying domestic violence against women.

Primary health care providers in this study are more inclined to perceive domestic violence negatively. Inadequate knowledge and negative personal values can impact adversely on detection and management of battered women. Clearly, education efforts that challenge these attitudes of tolerance and transmit the idea of social responsibility concerning issues of domestic violence are necessary. Breaking the climate of social tolerance would contribute to the informal social control of domestic violence against women.

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