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Knowledge and perception of domestic violence among primary care physicians and nurses: A comparative study

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KEYWORDS

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Abstract *Introduction:* Domestic violence (DV) has a deteriorating influence on society by affecting victims, their children, families, and friends, as well as social and financial relationships. Primary care providers, including physicians and nurses, frequently are the first in the community to encounter the battered women.
Objective: The aim of this work was to compare the knowledge and perception of primary care physicians and nurses about DV.
Methods: This study was carried out in all primary health care centers in Kuwait. All physicians and nurses who were currently working in these centers during the study period were asked to complete a self-administered close-ended questionnaire that included personal and working conditions information. It included also knowledge about prevalence of DV, and four main aspects relevant to

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DV, namely deprivation, psychological, physical and sexual domains. A 5-point, Likert-scale was used to assess participant's answers for each item.

Results: The response rate was 62.8% for physicians and 61.1% for nurses. The study revealed that the overall knowledge score was higher in physicians than nurses. Also, the scores for the individual domains were significantly higher for physicians than nurses except for psychological one.

Conclusion: Overall, primary care physicians and nurses had poor knowledge and many had negative perception regarding DV. Although physicians are somewhat more knowledgeable about DV, many more educational activities are needed.

1. Introduction

Domestic violence (DV), also known as intimate partner violence (IPV), is defined as actual or threatened physical, sexual, or psychological harm by current or former partner or spouse.[1–3]

Worldwide population surveys among women indicated that between 10% and 50% were at some stage abused by an intimate partner.[4,5] Past or current family violence is an important and common problem experienced by women seen for medical care.[6] DV has a deteriorating influence on society by affecting victims, their children, families, and friends, as well as social and financial relationships. Abused females who have poor physical and mental health suffer more injuries and use more medical resources than non-abused females. Females who have experienced physical, sexual, or emotional violence suffer a range of health problems, often in silence. Gender-based violence is widely recognized as an important public health problem, both because of the acute morbidity and mortality associated with assault and its longer-term impact on women's health.[7,8]

Violence against women is a common problem affecting large numbers of women who present to primary care practice.[9] Since primary care providers, including physicians and nurses, frequently are the first in the community to encounter the battered woman, they must be equipped with the necessary knowledge, training and experience to identify the problem and manage the patient properly.[10] Although primary care physicians may be uncomfortable inquiring about DV, a knowledge of patients' IPV victimization may help them develop a better understanding of patients' presenting symptoms and health risks, form more effective therapeutic relationships, and work towards reducing the myriad health risks associated with IPV.[9]

The nurse needs to organize a coherent set of knowledge and experiences in view of this concrete situation, so that health care for women does not cause suffering and anguish.[11] Unfortunately, no medical curricula comprehensively cover DV-related issues, such as legal rights of females and the medical consequences of DV and intervention strategies in Kuwait. To our knowledge, no collaborative training projects were carried out by different organizations. Neither clinical guidelines nor specific recommendations with regard to DV have been implemented.

There are many surveys which have assessed the knowledge, attitude, and practices regarding DV in different health care providers in developed countries.[12,13] In Kuwait, few studies have been conducted to evaluate primary health care providers' knowledge and attitude about DV.[14–17] The aim of this work was to compare the knowledge of primary care physicians and nurses regarding DV.

2. Methods

2.1. Setting and design

The health care system in Kuwait is divided into five regional health authorities. Primary health care is provided by 78 centers served by 899 family practice physicians or general practitioners, and 1617 nurses. FPs undergo 4 years of specialization during which they receive training in the management of a wide range of acute and chronic physical and psychosocial conditions and illnesses that are prevalent in family practice. GPs do not undergo any specialization training after completing medical studies. Nurses are subjected for pre-employment training in the form of one week orientation program. In addition Kuwaiti nurses are subjected to 9 months rotation program in different specialties. Also, nurses have the opportunity for on-the-job training at central and local health region levels.

The present study is a part from a larger study that was conducted to explore the knowledge, perception and attitude of primary health care providers in Kuwait towards DV. It was carried out during May–July 2010 in all primary health care centers in the five health regions in Kuwait. The study design is a cross-sectional descriptive one. All 899 currently working physicians and 1617 currently registered and working nurses were asked to participate in the study. Local ethics committee approval was obtained for the study.

2.2. Data collection

A self-administered close-ended questionnaire was used to obtain data from the participants. It was derived from other published studies dealing with the same topic as well as from our own experience and has been validated by the authors before use. It included socio-demographic data (age, gender, nationality, marital status, education, specialty, job position, years of experience, income), participants' knowledge regarding DV, sources of knowledge, and topics to be included in future workshops and guidelines.

Apart from personal information and prevalence of DV, the questionnaire included 23 items that are relevant to a number of DV facets. We divided the 23 items into 4 domains of DV namely deprivation domain (10 items), psychological domain (4 items), physical domain (6 items), and sexual relationship (3 items).

Participants indicated their degrees of relative knowledge for each item using a 5-point, Likert-scale ranging from 1 = strongly disagree (not violence through) to 5 = strongly agree (severe violence). High scores for definition of DV indicated that these statements were considered as more sever violence. Low scores showed that the respondents were to perceive the statements less likely as violence. For each participant, the scores of each domain were summed so as to show each participant's knowledge level. The percent score for each domain was calculated as follows: ''sum of score multiplied by 100/number of items multiplied by 5''.

The administrative time for the questionnaire was mostly 10 min. Participation was optional and data collection was anonymous.

2.3. Statistical analysis

Frequency and percentage were initially presented to describe our sample followed by comparative analyses between physicians and nurses using Chi square test (X^2) for categorized variables and student *t*-test for quantitative variables. Statistical significance was set at 0.05. Data were analyzed using the SPSS software package for social sciences; Version 17.0.

3. Results

Out of 899 physicians available during the study period, 565 agreed to participate in the study with a response rate of 62.8%; and out of 1617 registered nurses currently working in primary health care, 988 returned the filled questionnaires with a response rate of 61.1%.

Demographic data and working conditions were presented in Table 1. The age of the physicians ranged from 24 to 65 years (mean = 39.9 ± 9.1). Of the participating physicians, 46.9% were males, 43.2% were Kuwaiti, 87.3% were married, 68.3% had higher degree than bachelor, 61.6% were GPs. Two thirds of them were assistant registrar or registrar whereas one third were senior registrar or higher, 59.4% had profession experience ⩾10 years (mean = 13.0 ± 8.4), 60.2% had monthly income <1500 KD, and only 21.9% had an income ⩾2000 KD. The age of the nurses ranged from 23 to 64 years (mean = 34.8 ± 7.5). Of them, 18.1% were males, 8.9% were Kuwaiti, 84.8% were married, 14.2% had higher degree than bachelor. One thirds of them were assistant nurse or nurse, 21.8% had professional experience ⩾10 years (mean = 10.2 ± 7.4), Almost all of them (97.5%), had monthly income

Table 1 General characters of participating physicians and nurses.

Characteristics	Physicians		Nurses		Significance
	No.	%	No.	%	
Age					
<30	67	11.9	239	24.2	163.32
30–39	212	37.5	553	56.0	<0.001
⩾40	286	50.6	196	19.8	
Gender					
Males	265	46.9	179	18.1	145.88
Females	300	53.1	809	81.9	<0.001
Nationality					
Kuwaiti	244	43.2	88	8.9	251.29
Non-Kuwaiti	321	56.8	900	90.1	<0.001
Marital status					
Single	55	9.7	132	13.4	6.42
Married	493	87.3	838	84.8	0.04
Widowed/divorced	17	3.0	18	1.8	
Qualification					
Bachelor	179	31.7	848	85.8	470.54
Higher	386	68.3	140	14.2	<0.001
Experience (*year*)					
<5	107	18.9	244	24.7	23.16
5–9	122	21.6	529	53.5	<0.001
⩾10	337	59.4	215	21.8	
Job					
Assistant (registrar/nurse)	157	27.8	14	1.4	438.35
Registrar/nurse	218	38.6	306	31.0	<0.001
Senior registrar/nurse staff	129	22.8	656	66.4	
Specialist/head nurse/higher	61	10.8	12	1.2	
Monthly income (*KD*)					
<1000	101	17.9	963	97.5	1060.26
1000–1499	239	42.3	25	2.5	<0.001
1500–1999	101	17.9	0	0.0	
⩾2000	124	21.9	0	0.0	
Total	565	100.0	988	100.0	

< 1000 KD. Significant differences were found between physicians and nurses regarding all personal variables.

Table 2 Prevalence of domestic violence in opinion of the participating physicians and nurses.

	Physicians		Nurses	
	Prevalence	(%)	Prevalence	(%)
< 30	307	54.3	367	37.1
⩾30	162	28.7	277	28.0
Do not know	96	17.0	344	34.8
Total	565	100.0	988	100.0

$X^2 = 64.85$, $P < 0.001$.

Table 2 demonstrates participants' knowledge about the prevalence of DV all over the world. Only 28.7% of physicians indicated that the prevalence in Kuwait is ⩾30% whereas the remaining physicians either did not know (17.0%) or indicated that the prevalence is < 30% (54.3%). On the other hand, 28.0% of nurses indicated that the prevalence of DV is ⩾30% whereas 34.8% did not know and 37.1% indicated that the prevalence is < 30%. This difference was statistically significant ($P < 0.001$).

Considering each item of DV, Table 3 illustrates the proportion of agreement (strongly agree/agree) among participants about definition of DV. Regarding deprivation, there were significant differences between physicians and nurses

Table 3 Participating physicians and nurses' perception of statements as types of domestic violence.

Statement	Physicians (n = 565)		Nurses (n = 988)		X^2 (P)
	Agree/strongly agree (%)	Mean score	Agree/strongly agree (%)	Mean score	
Deprivation/neglect					
Keeping women from seeing her friends	49.2	3.2 ± 1.3	46.8	3.3 ± 1.4	0.79 (0.37)
Restricting women from contacting with family relatives	66.2	3.6 ± 1.3	58.4	3.5 ± 1.5	9.20 (0.002)
Insisting to know where are women all the times	40.4	3.1 ± 1.2	49.4	3.4 ± 1.3	11.82 (0.001)
Ignoring or treating women indifferently	53.9	3.4 ± 1.3	44.4	3.1 ± 1.5	13.42 (< 0.001)
Getting angry when women talk with other men	40.9	3.1 ± 1.2	38.4	3.0 ± 1.4	0.68 (0.41)
Suspicion of unfaithfulness of women	51.9	3.3 ± 1.4	42.3	3.0 ± 1.6	13.21 (< 0.001)
Asking permission before seeking health care	42.5	3.1 ± 1.3	44.2	3.2 ± 1.5	0.40 (0.53)
Men have the right to enforce women to wear suitable clothes	38.4	3.1 ± 1.3	42.7	3.2 ± 1.4	2.75 (0.10)
Obligation of women to share in the house expenses	29.8	2.9 ± 1.4	28.7	2.7 ± 1.4	0.21 (0.65)
Men should be the decision makers in home management	31.7	2.7 ± 1.3	30.3	2.9 ± 1.3	0.29 (0.59)
Percentage score	62.1 ± 13.2		62.5 ± 14.1		$t = 0.60$, $P = 0.44$
Psychological					
Insulting women and make them feel bad about themselves	74.1	2.8 ± 1.3	60.7	3.5 ± 1.5	28.74 (< 0.001)
Humiliating women in front of other people	79.8	3.9 ± 1.2	63.6	3.6 ± 1.5	44.31 (< 0.001)
Intimidating women on purpose	84.6	4.0 ± 1.3	70.7	3.8 ± 1.4	37.59 (< 0.001)
Threatening or hurting women	86.4	4.3 ± 1.2	75.9	4.0 ± 1.4	24.33 (< 0.001)
Percentage score	82.4 ± 18.3		74.3 ± 20.4		$t = 7.76$, $P < 0.001$
Physical					
Slapping or throwing women with something that could hurt	99.8	4.8 ± 0.4	99.3	4.7 ± 0.5	1.98 (0.16)
Pushing or shoving women	97.1	4.7 ± 0.5	97.4	4.6 ± 0.6	0.06 (0.82)
Hitting with a fist	99.3	4.8 ± 0.4	99.4	4.7 ± 0.5	0.06 (0.81)
Kicking, dragging or beating women	99.7	4.9 ± 0.4	99.7	4.7 ± 0.5	0.03 (0.87)
Chocking or burning women	99.8	4.9 ± 0.3	99.7	4.7 ± 0.5	0.22 (0.64)
Threatening with a knife, stick, gun	99.8	4.9 ± 0.4	99.1	4.7 ± 0.5	0.04 (0.84)
Percentage score	96.5 ± 6.6		93.8 ± 8.3		$t = 6.81$, $P < 0.001$
Sexual					
Forcing women to have sex against their will by the husband	92.8	4.3 ± 0.9	93	4.2 ± 0.9	0.01 (0.91)
Raping by foreigners	99.9	4.9 ± 0.3	99.8	4.7 ± 0.5	0.01 (0.91)
Sexual harassment	99.1	4.8 ± 0.4	98.4	4.7 ± 0.5	1.45 (0.23)
Percentage score	93.7 + 7.8		91.0 + 9.0		$t = 6.02$, $P < 0.001$
Overall percentage score	78.7 ± 8.2		76.4 ± 7.9		$t = 5.41$, $P < 0.001$

Table 4 Main sources of physicians and nurses' knowledge about domestic violence.

Source of knowledge	Physicians (n = 565)	Nurses (n = 988)	X^2 (P)
Medical school	18.2	33.6	42.13 (<0.001)
Practice	45.7	39.7	5.30 (0.02)
In job training workshop	13.3	33.2	73.22 (<0.001)
Personal experience with families	65.8	53.8	21.26 (<0.001)
Conferences	20.7	29.6	14.50 (<0.001)
Literatures and books	35.0	42.1	7.50 (0.006)
Media	61.6	73.5	25.20 (<0.001)

Table 5 Topics physicians and nurses agree/strongly agree to be included in training workshops and medical guidelines about domestic violence.

Topics	Physicians (n = 565)	Nurses (n = 988)	X^2 (P)
Definition of domestic violence	85.5	83.0	1.65 (0.20)
Background facts and information	86.0	84.2	0.91 (0.34)
Features associated with domestic violence	87.8	81.6	10.22 (0.001)
Assessment questions	86.0	84.5	0.64 (0.42)
Key aspects of history taking	85.5	82.4	2.51 (0.11)
Advice on accurate record keeping	82.5	83.1	0.10 (0.78)
Legal overview, including role of police	80.2	75.4	4.83 (0.03)
Review of safety issues for women/staff	83.9	85.2	0.42 (0.52)
Information about community agencies	82.1	85.9	3.99 (0.05)
Selected bibliography	81.0	77.9	2.12 (0.15)

Percentages are presented.

about considering four statements as types of DV namely "restricting women from contacting with family relatives" (66.2% versus 58.4%. $P = 0.002$); "insisting to know where are women all the times", (40.4% versus 49.4%, $P = 0.001$); "ignoring or treating women indifferently" (53.9% versus 44.4%, $P < 0.001$); "suspicion of unfaithfulness of women" (51.9% versus 42.3%, $P < 0.001$). The mean scores for deprivation aspect items ranged from 2.7 ± 1.3 to 3.6 ± 1.3 out of five for physicians and 2.7 ± 1.4 to 3.5 ± 1.5 for nurses. The difference between the overall percentage scores of physicians and nurses was not significant (62.1 ± 13.2 versus 62.5 ± 14.1, $P = 0.44$).

A higher proportion of the participants agreed about psychological statements, with higher scores than that of the deprivation ones with a significant higher overall percentage score in the physicians group (82.4 ± 18.3 versus 74.3 ± 20.4, $P < 0.001$).

Higher mean scores were recorded for physical and sexual items than for deprivation and psychological items. Mostly all of the participants agreed about statements regarding all physical and sexual items with the highest recorded scores. Yet, the overall percentage scores for physicians were significantly higher than for nurses (96.5 ± 6.6 versus 9.3 ± 8.3, $P < 0.001$ and 92.7 ± 7.8 versus 91.0 ± 9.0, $P < 0.001$ respectively)

Table 4 describes respondents' sources of information regarding DV. Only 18.2%, of the physicians received their knowledge mainly from medical school, 13.3% in training workshop, 20.7% in conferences, whereas 33.6%, of nurses received their knowledge mainly from medical school, 33.2% in training workshop, 29.6% in conferences. Personal experience, media and practice were the most common sources of information.

Table 5 shows that the majority of the participating physicians and nurses indicated that they were willing to receive training or guidelines instructions in the different topics for management of DV in the future.

4. Discussion

This study provides important information about current knowledge and perception of primary care physicians and nurses towards DV, that can be used for planning future implementation for improving care in primary care settings.

The response rate in the current study was 62.8% for physicians and 61.1% for nurses, which are higher than reported in many other similar studies. These rates are considered acceptable for self administered questionnaire. The corresponding figures in studies that was conducted on physicians was 52.1% in Belgium,[12] 20% to 54% in US,[18,19] 32.8% in Canada,[6] For nurses, the response rates in other studies were 57% in Sweden,[20] and 59.78% in Canada,[6] This could be explained by the increasing interest of physicians and nurses working in Kuwait for improving their knowledge that subsequently increase nurse performance for ensuring the quality of care and health provision of battered women. However, the response rate in this study was lower than that recorded in other studies.[10,20–23] The non-response could be attributed to the lack of time and work load.

The findings of the present study showed that the awareness of the prevalence of DV among primary care physicians is poor as more than half of them denoted that the prevalence is <30% and 17% stated that they do not know. More nurses did know and lesser proportion than physicians believed that the prevalence is <30. This goes in agreement with other studies.[10,22,24–27] The majority of participants believed that the prevalence of DV to be low. In a similar study that was conducted in the US, 70% of nurses believed that DV was rare or very rare.[22] Shortage of care providers' knowledge and perception of DV have been identified as barriers to effective clinical responses by medical professionals.[21,22]

Sugg et al.[22] in his study, stated that the identification and management of persons being abused in clinical practice is low, with estimates that only 7–25% of cases are identified and 60–90% of patients are inadequately managed. Worldwide, DV is considered as one of the most frequent forms of gender-based violence.[28] DV is a complex area in which to undertake research. Consequently, studies exhibit a diversity of design and often focus on selected populations, making comparison difficult and of little value. Definitions of DV vary considerably, including different personal relationships and different degrees or types of violence. This particularly affects the results of prevalence studies.[29] Considering socio-ethical values in Kuwait society, there is no reliable and precise statistical data about DV.

In the present study, the overall percentage score was significantly higher for physicians than nurses. Different aspects of DV included deprivation, psychological, physical and sexual effects on battered women. The present study showed that, in spite of their relatively higher level of education, a large group of participants had negative perception to DV particularly regarding deprivation and psychological aspects. Physicians and nurses expressed the same percentage knowledge and perception score of deprivation aspect of DV. However, physicians recorded higher scores regarding statements like ''Restricting women from contacting with family relatives'', ''Ignoring or treating women indifferently'', and ''Suspicion of unfaithfulness of women''. This could be attributed to the higher socio-economic classes of physicians. Regarding psychological items, higher scores were recorded by physicians than nurses significantly as well as the total percentage score. Nearly all the participants agreed about physical and sexual statements. However, the percentage total score for both domains showed higher levels in doctors than nurses. Psychological items came in between deprivation in one side and physical and sexual aspects in the other side. This may be due to the fact that the term psychological abuse is the least clearly defined among the various types of abuse.[13]

The finding of this study showed that physicians perceived DV more positively than nurses in all its domains except for psychological domain. Health care providers possess certain opinions and prejudices based on their own upbringing culture and religious beliefs. The answers of nurses may reflect their own beliefs rather than their knowledge about definition of DV. Traditional beliefs regarding the family privacy, family unity and gender role was found to have posed difficulties to nurses in their perception of DV.[30] Also, as females were more prevalent in the nurse group than in the doctor one, this might affect the participants perception of DV in different domains particularly psychological one. Researches showed females to be more interested in psychological problems and female patients to give more psychological information to female health providers.[31] Some studies on partner abuse found female health providers to be more involved with victims, showing more commitment and adequate response compared to males, where others found no effect of gender.[32,33]

The results of this study indicated that less than a third of physicians and about a third of the participating nurses received their knowledge and instructions about DV from scientific formal sources as medical schools, training courses and conferences. This goes in accordance with other studies.[1,24]

Primary care professionals education, particularly nurses, may be far from achieving the recommendation that all relevant professional schools include education about DV. In addition, the majority of both physicians and nurses in the present study felt that they would benefit from additional instructions in DV identification and intervention. This could be explained by the increasing interest of participants working in Kuwait for improving their knowledge that subsequently increase their performance for ensuring the quality of care and health provision of battered women. Also, as the majority of the study population were females, this would explain the increased interest of them for further education and training regarding DV against women.

The efficiency of training programs in managing victims of DV has been shown in different studies. According to the results of previous studies, the content, frequency, and timing of training are as important as the presence of training.[34,35] Richardson et al. concluded that suitably targeted educational seminars can improve knowledge, and management in the field DV, printed educational material is ineffective and that the content of courses needs to be tailored according to the participants pre-existing knowledge.[36]

The work presented here represents an initial effort to provide basic information about the knowledge and perception of primary care providers about victims of DV. Future DV guidelines and protocols may increase the identification of women experiencing DV, but without ongoing commitment to their implementation and staff training, identification drops sharply. The potential value of guidelines lies in the standardization of good practice, which, in the absence of intervention studies around DV, must be based on local consensus rather than evidence of effectiveness. This consensus will need to embrace social and police as well as health care services.[29]

We apologize some limitations in the present study. It must be acknowledged that assessment of knowledge in our survey was limited to some indicators of awareness, perception and familiarity, while the survey did not entail direct questions on risk factors, signs, symptoms, and co-morbidity patterns relating to DV as an issue of knowledge. Also, we did not make an attempt to assess participants' knowledge of screening strategies. Many factors were not taken into account and should be considered in future studies. Another limitation of the study was its cross-sectional nature that creates difficulties in ascertaining causality. However, our results are consistent with many other studies. Also, demographic information about non-respondents was not made available for comparison. Finally, as the study was limited to the primary care setting, results may not be generalized to other health care settings.

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