



ORIGINAL ARTICLE

Barriers for administering primary health care services to battered women: Perception of physician and nurses

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Received 7 June 2011; accepted 12 August 2011

Available online 15 September 2011

KEYWORDS

Battered women;
Barriers;
Physicians;
Nurses;
Primary health care

Abstract *Background:* Violence against women is an important public-health problem that draws attention of a wide spectrum of clinicians. However, multiple barriers undermine the efforts of primary health care workers to properly manage and deal with battered women.

Objectives: The aim of the present study was to reveal barriers that might impede administering comprehensive health care to battered women and compare these barriers between nurses and physicians and identify factors affecting such barriers.

Methods: A total of 1553 medical staff from 78 primary health care units agreed to share in this study, of these 565 were physicians and 988 were nurses.

Results: Barriers related to the battered woman topped the list of ranks for both physicians ($93.1 \pm 17.4\%$) and nurses ($82.1 \pm 29.3\%$). Institutional barriers ($87.2 \pm 21.5\%$), barriers related to the health staff ($79.8 \pm 20.5\%$), and social barriers ($77.5 \pm 21.7\%$) followed, respectively, in the

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rank list of physicians while for the list of nurses, social barriers ($75.1 \pm 30.1\%$), institutional barriers ($74.3 \pm 31.7\%$) followed with barriers related to health staff ($70.0 \pm 30.0\%$) at the bottom of the list. Only duration spent at work and degree of education of nurses were significantly affecting the total barrier score, while these factors had no significant association among physicians.

Conclusion: Real barriers exist that might interfere with administering proper comprehensive health care at the primary health care units by both physicians and nurses. This necessitates design of specific programs to improve both the knowledge and skills of the medical staff to deal with violence among women. Also, available resources and infrastructure must be strengthened to face this problem and enable primary health care staff to care for battered women.

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1. Introduction

Over the past 10 years, violence against women has become recognized as a serious public-health issue.¹ The WHO multi-country study on women's health and domestic violence (DV) showed that the lifetime prevalence of physical or sexual partner violence, or both, varied between 15% and 71% in 10 countries.²

Battered women suffer from a wide range of physical, emotional and social negative impacts or sexual abuse. The physical health consequences include both injury and a broader range of impacts. These impacts include nutritional status (e.g. mal-nutrition, digestive problems and hypertension), sexual and reproductive health (e.g. fertility, contraceptive use, and sexually transmitted infections); maternal health (e.g. increased risk for high blood pressure, risk of ante-partum hemorrhage and of miscarriage); and mental health (e.g. risk of depression and suicide).³⁻⁹

Given that intimate partner violence (IPV) is an important risk factor for a range of health problems, there has been growing awareness of the need for health providers to be able to respond better to cases of violence that they encounter, and to help identify women experiencing violence and refer them to specialized services.^{10,11} There is growing recognition of the public-health burden of DV against women and the potential for the health sector to identify and support abused women. Several models for integration of medical services were developed to deal with DV against women. These models included selective integration of one or two services at the same site,¹⁰⁻¹² comprehensive range of services delivered in one setting,^{13,14} and multisite linkage of services with external referral of battered women for specialized services.¹⁵ A major concern in the provision of services for violence is to ensure that women are not further victimized by the health sector, but are treated sensitively.¹⁶ Related to this, a common issue of concern among the various models is the challenge of ensuring that health personnel are appropriately trained to provide support services.

Multiple challenges face provision of integrated services to battered women. These range from individual service providers' attitudes and lack of knowledge about violence to managerial and health systems' challenges, such as insufficient staff training, lack of inclusion of violence-response training in national medical curricula, no clear policies on DV, and lack of coordination among various actors and departments involved in planning integrated services. The influence of more external structural and political issues (including laws on DV and the availability of external sources of support for women experiencing violence) is also important.¹⁷ Although several

intervention approaches have been suggested to deal with battered women in the primary health care, yet many barriers could undermine the efforts of primary health care staff to properly manage and deal with these cases. Thus, the current study was formulated to reveal such barriers and the factors affecting them as well as if these barriers differ between physicians and nurses.

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 share in the study with a response rate of 61.7%. The study covered the period January–August 2010. Data were collected over three months starting from May to July 2010. 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 physician before starting the interview. A self-administered questionnaire was handled to physicians and nurses. In addition, the purpose and importance of the research were discussed with the director of the health center.

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 barrier scale consisted of 27 questions covering four sub-domains. The first sub-domain dealt with the social barriers that might interfere with proper care of victimized women and consisted of eight questions, while the second sub-domain included six questions dealing with institutional barriers, the third sub-domain consisted of eight questions related to health staff and the last sub-domain dealt with barriers related to the victim and consisted of five questions. The reliability and validity of this scale was fully studied as a part of a large study dealing with most of the aspects of DV against women.

A pilot study was carried out on 60 physicians and nurses (not included in the final study). This study was formulated to test the clarity, applicability of the study tools, accommodate the aim of the work to actual feasibility, identify the dif-

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 interviewing the physicians 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 barrier score as well as for each domain of barriers. Before calculating the sum of score; the score of negative questions was reversed. The percent score was calculated as follows: sum of score \times 100/number of items. The sum was treated to yield a range of 100% with a minimum of zero and a maximum of 100.

2.1. Statistical analysis

Before analysis; data were imported to the Statistical Package for Social Sciences (SPSS) which was used for both data anal-

ysis and tabular presentation. Descriptive measures (count, percentage, minimum, maximum, arithmetic mean and standard deviation) as well as analytic ones as Mann Whitney *Z* test (for testing scores and non normally distributed quantitative variables), Chi square (for qualitative variables), and Student *t*-test (for normally distributed quantitative variables). The level of significance selected for this study was $P \leq 0.05$.

3. Results

Table 1 shows socio-demographic characteristics of studied physicians and nurses. Physicians were significantly older than nurses (40.0 ± 9.1 years compared with 34.8 ± 7.5 years, $P < 0.001$) and spent more years at the current job (13.0 ± 8.4 years compared with 10.2 ± 7.4 years, $P < 0.001$). Physicians also, had higher educational qualification than nurses (68.3% had high qualification compared with 14.2%, $P < 0.001$). They also tended to have high salary as 39.8% of them were earning more than 1500 KD compared only with 0.7% of nurses. The majority of nurses were of Non-Arab nationality (70.7%), mainly Indians and Filipinos, while the majority of physicians were Arabs (51.5%) and Kuwaitis (43.2%), the latter nationality constituted only 8.9% of nurses. Singles were likely encountered among nurses (13.4%) than physicians (9.7%) while currently married constituted 87.3% of physicians compared with 84.8% of nurses. These differences were statistically significant, $P = 0.040$.

Table 2 shows barriers for administering proper care to women experiencing DV by physicians and nurses. Although

Table 1 Socio-demographic characteristics of physicians and nurses.

Character	Physicians (<i>n</i> = 565)		Nurses (<i>n</i> = 988)		<i>P</i> value
	No.	%	No.	%	
<i>Age</i>					
Min–Max	24.0–65		23.0–64		< 0.001*
Mean \pm SD	40.0 \pm 9.1		34.8 \pm 7.5		
<i>Sex</i>					
Male	265	46.9	179	18.1	< 0.001*
Female	300	53.1	809	81.9	
<i>Nationality</i>					
Kuwaiti	244	43.2	88	8.9	< 0.001*
Arab	291	51.5	201	20.3	
Non-Arab	30	5.3	699	70.7	
<i>Marital status</i>					
Single	55	9.7	132	13.4	0.040*
Married	493	87.3	838	84.8	
Divorced/widowed	17	3.0	18	1.8	
<i>Qualification</i>					
Bachelor degree	179	31.7	848	85.8	< 0.001*
Higher	386	68.3	140	14.2	
<i>Years at work</i>					
Min–Max	1–40		1–37		< 0.001*
Mean \pm SD	13.0 \pm 8.4		10.2 \pm 7.4		
<i>Income (KD)</i>					
< 1000	101	17.9	963	97.5	< 0.001*
1000–	239	42.3	18	1.8	
1500+	225	39.	7	0.7	

* $P < 0.05$.

Table 2 Barriers for administering proper care stated by physicians and nurses.

Type of barriers	Physicians (n = 565)		Nurses (n = 988)		χ^2 test (P)
	No.	%	No.	%	
<i>Social barriers (B1)</i>					
Lack of legal arrangements	486	86.0	787	79.7	9.84* (0.002)
Lack of social support institutions	468	82.8	818	82.8	0.00 (1.000)
Low socio-economic status of women	364	64.4	713	72.2	10.13* (0.001)
Operational nature of the security forces	431	76.3	661	66.9	15.15* (<0.001)
Cultural structure	502	88.8	759	76.8	34.06* (<0.001)
Feudal and traditional families	515	91.2	785	79.5	36.06* (<0.001)
Low educational level	463	81.9	774	78.3	2.89 (0.09)
Religion	275	48.7	639	64.7	38.02* (<0.001)
Total % score (mean \pm SD)	77.52 \pm 21.73		75.10 \pm 30.12		Z = 1.69 (0.09)
<i>Institutional barriers (B2)</i>					
Lack of proper place to interview the victim	477	84.4	690	69.8	40.948* (<0.001)
Lack of multidisciplinary approach	513	90.8	726	73.5	66.804* (<0.001)
Lack of safety for health care workers	507	89.7	814	82.4	15.264* (<0.001)
Lack of social care workers in health centers	515	91.2	785	79.5	36.063* (<0.001)
Lack of job descriptions and procedures	495	87.6	696	70.4	59.246* (<0.001)
Lack of staff	450	79.6	694	70.2	16.382* (<0.001)
Total % score (mean \pm SD)	87.23 \pm 21.51		74.31 \pm 31.86		Z = 7.642* (<0.001)
<i>Barriers related to health staff (B3)</i>					
Lack of training	509	90.1	725	73.4	61.478* (<0.001)
Lack of knowledge on legality of violence	538	95.2	777	78.6	76.122* (<0.001)
Time constraints	491	86.9	711	72.0	45.858* (<0.001)
Heavy workload of health care workers	501	88.7	756	76.5	34.420* (<0.001)
Health staff can not help	389	68.8	572	57.9	18.287* (<0.001)
Health staff experience the same abuse	318	56.3	570	57.7	0.292 (0.589)
Need of increased authorization	499	88.3	774	78.3	24.217* (<0.001)
Shame of asking questions about abuse	360	63.7	647	65.5	0.493 (0.482)
Total % score (mean \pm SD)	79.76 \pm 20.45		69.99 \pm 30.00		Z = 4.974* (<0.001)
<i>Barriers related to the victim (B4)</i>					
Hide and endure abuse despairingly	530	93.8	804	81.4	45.839* (<0.001)
Turning back to the same environment	529	93.6	778	78.7	59.727* (<0.001)
Afraid of the repeat of abuse	523	92.6	837	84.7	20.351* (<0.001)
Lack of knowledge on legal rights	520	92.0	839	84.9	16.652* (<0.001)
Shame	527	93.3	799	80.9	44.312* (<0.001)
Total % score (mean \pm SD)	93.06 \pm 17.38		82.13 \pm 29.26		Z = 7.886* (<0.001)
Overall % barrier score (B) (mean \pm SD)	83.22 \pm 14.42		74.71 \pm 25.76		Z = 4.130* (<0.001)

Z = Mann Whitney test.

* P < 0.05.

the mean percent score of social barriers did not show any significant difference between the two groups (77.5 \pm 21.7% compared with 75.1 \pm 30.1%, $P = 0.092$) yet, the individual questions constituting this domain showed significant differences between the two groups. Nurses were more likely to state low socio-economic status of women (72.2% compared with 64.4%, $P = 0.001$) and religion (64.7% compared with 48.7%, $P < 0.001$) as social barriers for administering the required care while physicians were more likely to state lack of legal arrangement (86.0% compared with 79.7%, $P = 0.002$), operational nature of the security forces (76.3% compared with 66.9%, $P < 0.001$), cultural structure (88.8% compared with 76.8%, $P < 0.001$), and feudal and traditional families (91.2% compared with 79.5%, $P < 0.001$) as social barriers for administering the required care for battered women. Physicians tended to have a significantly higher score on the institutional barriers than nurses (87.2 \pm 21.5% compared with 74.3 \pm 31.9%, $P < 0.001$) with significantly higher proportions for all the questions of this domain. Generally speaking, the same pattern can be observed for the barriers

related to health staff domain with an overall mean percent score of 79.8 \pm 20.5% for physicians and 70.0 \pm 30.0% for nurses, $P < 0.001$. Only two statements did not show any significant differences between the two groups "health staff experience the same abuse" and "shame of asking questions about abuse". Also the barrier domain dealing with the victim herself showed similar pattern to the previous ones with an overall percent score of 93.1 \pm 17.4% for physicians and 82.1 \pm 29.3% for nurses, $P < 0.001$. Overall, physicians tended to have a higher mean percent score for the grand total barrier domain than nurses (83.2 \pm 14.4% compared with 74.7 \pm 25.7%, $P < 0.001$).

Table 3 portrays factors affecting percent scores of barrier domains for both physicians and nurses. No gender differences can be observed for all the domains of barriers stated by nurses. However, female physicians had a significantly higher percent score of the social domain while male physicians tended to have a significantly higher mean percent score for the health staff barrier. Although no significant differences were revealed between level of education and scores of barriers

Table 3 Relation between characteristics of nurses and physicians and domains of barriers (mean \pm SD).

Character	Barrier domains of physicians					Barrier domains of nurses				
	Social (B1)	Institutional (B2)	Health staff (B3)	Victim (B4)	Total barrier score (B)	Social (B1)	Institutional (B2)	Health staff (B3)	Victim (B4)	Total barrier score (B)
Gender	(0.018)*	(0.153)	(0.012)*	(0.288)	(0.962)	(0.273)	(0.658)	(0.268)	(0.141)	(0.522)
Male	76.1 \pm 20.5	86.3 \pm 22.4	82.1 \pm 19.1	92.9 \pm 17.2	83.3 \pm 14.2	74.3 \pm 28.4	75.3 \pm 31.9	72.4 \pm 29.2	84.6 \pm 28.0	75.9 \pm 25.3
Female	78.8 \pm 22.7	88.1 \pm 20.7	77.7 \pm 21.4	93.1 \pm 17.6	83.1 \pm 14.6	75.3 \pm 30.5	74.1 \pm 31.9	69.5 \pm 30.2	81.6 \pm 29.5	74.5 \pm 25.9
Education	(0.95)	(0.21)	(0.72)	(0.67)	(0.78)	(0.39)	(0.01)*	(0.001)*	(0.002)*	(0.031)*
Bachelor	77.8 \pm 21.1	88.9 \pm 19.4	80.5 \pm 19.4	92.9 \pm 17.5	83.9 \pm 13.3	74.9 \pm 30.9	73.1 \pm 32.5	86.6 \pm 30.7	80.9 \pm 30.2	73.8 \pm 26.5
Higher	77.4 \pm 22.0	86.4 \pm 22.4	79.4 \pm 20.9	93.1 \pm 17.3	82.9 \pm 14.9	75.9 \pm 25.3	81.4 \pm 27.1	78.3 \pm 24.2	89.4 \pm 21.8	80.3 \pm 20.0
Job	(0.37)	(0.06)	(0.12)	(0.60)	(0.09)	(0.01)*	(0.02)*	(0.003)*	(0.08)	(0.58)
Registrar/nurse	77.7 \pm 22.0	87.7 \pm 21.1	80.4 \pm 19.8	93.2 \pm 17.0	83.6 \pm 14.3	73.1 \pm 28.8	79.1 \pm 27.3	74.8 \pm 26.0	85.6 \pm 25.0	77.3 \pm 21.4
Specialist/head nurse	76.4 \pm 19.6	83.1 \pm 24.4	74.6 \pm 24.5	91.8 \pm 20.1	80.2 \pm 15.6	76.1 \pm 30.7	72.0 \pm 33.6	67.7 \pm 31.5	80.4 \pm 31.0	73.5 \pm 27.5
Age	[−0.002]	[−0.06]	[−0.02]	[−0.09]*	[−0.03]	[0.01]	[0.07]*	[0.05]	[0.06]*	[0.05]
Years at work	[0.02]	[−0.06]	[−0.03]	[−0.09]	[−0.03]	[0.06]*	[0.12]*	[0.06]*	[0.09]*	[0.08]*

() *P* value of Mann Whitney test.

[] Spearman correlation coefficient.

Job categories of nurse are: Nurse, Head nurse.

B: Barrier domain.

* *P* < 0.05.

among physicians, yet, controversial pattern can be observed among nurses. Those nurses with higher level of education tended to have higher scores on the institutional and victim barriers, while those with bachelor degree had significantly a higher score on the health staff barrier domain. Head nurses had significantly higher mean percent score on the social barrier domain while nurses had significantly higher scores on the institutional and health staff barrier domains. While years spent at work by physicians did not show any significant correlation with all percent scores of the barriers domains, yet it showed significant positive correlation with all barrier domains for nurses.

4. Discussion

The current study was designed to reveal the barriers that might impede primary health care medical staff to offer proper and comprehensive services to battered women and to reveal the differences between physicians and nurses. To achieve these objectives 1553 medical staff from 78 primary health care units agreed to share in this study, of these 565 were physicians and 988 were nurses.

The results of this study showed that there are real major barriers facing the medical staff to admit comprehensive services to battered women. Physicians tended to admit a higher mean percent score of overall barriers ($83.2 \pm 14.4\%$) than nurses ($74.7 \pm 25.8\%$, $P < 0.001$). Among the four studied barrier domains, those related to the victim (battered women) topped the rank for both physicians and nurses. The individual questions of this domain included hiding abuse, turning back to the same environment, shame, and lack of knowledge on legal right. Factors as shame, embarrassment, fear of partner's retaliation and perception that it is the doctor's role to intervene were revealed by some authors to prevent abused women from seeking help from health care providers.^{18,19} Woman's readiness to address the violence or leave the relationship, her perceived safety, and her concerns for her children, and ensuring that the inquiry is appropriate to the context of the clinical encounter.²⁰ Traditional beliefs regarding the family privacy, family unity and gender role was found to have posed difficulties to health care providers in their management of DV.²¹ However, many abused women do not mind being asked about violence and would like the health care providers to be more pro-active in asking questions on abuse.^{18,19,22,23}

Studied physicians, in this study, had a mean percent score of $79.7 \pm 20.5\%$ on the domain dealing with barriers related to health staff. Also, the studied nurses scored $70.0 \pm 30.0\%$ on the same domain, indicating that both of them agreed that they need empowerment to be able to deliver the required medical care. Health care providers need to be aware that DV is indeed a major medical problem and they have important roles to play in its detection and management.²⁴ Primary issues like lack of time, inadequate training, referral, and uncertainty about how to respond affect professional response to DV from these doctors.^{14,22,25,26}

Health care providers possess certain opinions and prejudices based on their own upbringing, culture and religious beliefs. These biases can affect their professional behavior including their intention to ask about abuse and create errors in clinical judgment in DV cases. Those feeling shame to ask

about domestic abuse constituted 63.7% and 65.5% of the studied physicians and nurses respectively. Other studies revealed that more than half of the clinicians and a third of the nursing staff reported a fear of offending patients in asking about DV. This may be related to the underlying belief that DV is a "private matter" and not within the scope of medical treatment.²¹ The findings of the current study supports this view as 88.3% of physicians and 78.3% of nurses reported that they need increased authorization to deal with abused women.

One of the main barriers regarding screening for DV is lack of knowledge and training health care professionals.²⁷⁻³² A number of studies have examined the knowledge, attitudes, and beliefs of physicians and/or nurses to identification of interpersonal violence. The common themes that emerge from these and other studies include gaps in provider knowledge and lack of education regarding domestic violence; lack of perceived system support, especially time; provider self-efficacy, including feelings of powerlessness and loss of control; poor interviewing or communication skills; providers' personal experience with abuse; fears about legal involvement; and provider age and years in practice.^{26,33-37} The results of the current study showed controversial findings with regard to impact of years spent at work on domain scores of barriers, where a significant positive correlation was demonstrated for nurses while a non significant one was demonstrated for physicians. Also nurses with higher level of education tended to have a significantly higher overall mean percent score than those just holding a bachelor degree. This might be attributed to lack of received training in this area in undergraduate and postgraduate continuing education or on job training.³⁸ What supports this is the declining of low knowledge and negative attitudes of providers towards screening for abuse by training and awareness of the links between DV against women and sexual and reproductive health,^{39,40} and feeling of empowerment and commitment to raise the issue of violence with their clients.¹⁴

Within institutional settings, having enabling factors for the management of DV will make the health care providers more inclined to manage these cases. Lack of multidisciplinary approach and job description and procedures were stated by 90.8% and 87.6% of physicians and 73.5% and 70.4% of nurses to form important barriers, preventing them to administer proper comprehensive care to battered women. The inefficiency or even absence of any effective intervention measures to deal with DV was stated by multiple authors.^{32,41} The health care providers may feel inadequate in helping the abused victims with the lack of knowledge on the availability of various domestic violence resources.

Differences of barriers to administering comprehensive services to battered women between nurses and physicians were also revealed in other studies; however, no clear explanation was provided for these differences.³² The current study revealed that higher level of education and spending more years at work were associated with having a higher percent score of the overall barrier scores, which elucidate the importance of job characteristics. However, the absence of such associations among physicians might not be in favor of this explanation.

It seems that dealing with violence problem among women needs intensive and detailed programs to train health care staff at the primary health care and increase their awareness about this problem. In addition, improving the infrastructures and

resources of these centers can play an important role to deal with this problem. Also, health promotion strategies are required to illustrate and clarify the roots of the problem in the whole community with special emphasis on habits, traditions, beliefs and social values of the community. Implementing such programs in Kuwait will definitely improve both the skills and attitude of primary health care staff to effectively deal with violence against women and improve the health outcome and might also decrease the prevalence of this problem among women through raising their awareness and positively improving their attitude toward self esteem and sticking to their human rights.

References

- Hageman-White C. European research on the prevalence of violence against women. *Violence Against Women* 2001;**7**:732–59.
- Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH. WHO multi-country study on women's health and domestic violence against women study team. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet* 2006;**368**:1260–9.
- Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002;**359**:1331–6.
- Campbell J, Jones AS, Dienemann J, Kub J, Schollenberger J, O'Campo P, et al. Intimate partner violence and physical health consequences. *Arch Intern Med* 2002;**162**:1157–63.
- Coker AL, Davis KE, Arias I, Desai S, Sanderson M, Brandt HM, et al. Physical and mental health effects of intimate partner violence for men and women. *Am J Prev Med* 2002;**23**:260–8.
- Kishor S, Johnson K. *Profiling domestic violence. a multi-country study*. Calverton MD: ORC Macro; 2004, p. 141.
- Riger S, Raja S, Camacho J. The radiating impact of intimate partner violence. *J Interpers Violence* 2002;**17**:184–205.
- Silverman JG, Decker MR, Reed E, Raj A. Intimate partner violence victimization prior to and during pregnancy among women residing in 26 US states: associations with maternal and neonatal health. *Am J Obstet Gynecol* 2006;**195**:140–8.
- Dutton MA, Green BL, Kaltman SI, Roesch DM, Zeffiro TA, Krause ED. Intimate partner violence, PTSD, and adverse health outcomes. *J Interpers Violence* 2006;**21**:955–68.
- d'Oliveira AF. Primary health care programs. Brazil's response to gender based violence. In: The second Interagency Gender Working Group's technical update on gender-based violence. Washington DC: IGWG; 2005. Available from: <<http://www.igwg.org/eventstrain/tecupdate2.htm>> [accessed on 5 June 2008].
- Schraiber LB, d'Oliveira AF. Violence against women and Brazilian health care policies: a proposal for integrated care in primary care services. *Int J Gynaecol Obstet* 2002;**78**(Suppl 1): S21–5.
- Needs Assessment Checklist for Clinical Management of Survivors of Sexual Violence. Pan American Health Organization, 2010.
- Rogow D, editor. Living up to their name: profamilia takes on gender-based violence. Quality/Calidad/Qualite, vol. 18. New York: Population Council; 2006. p. 35.
- Aksan HAD, Aksu F. The training needs of Turkish emergency department personnel regarding intimate partner violence. *BMC Public Health* 2007;**7**:350–9.
- Guedes AC, Stevens L, Helzner JF, Medina S. Addressing gender violence in a reproductive and sexual health program in Venezuela. In: Haberland N, Measham D, editors. Responding to Cairo. Case studies of changing practice in reproductive health and family planning. New York: New York Population Council; 2002. p. 257–73.
- Rastam A, editor. The rape report: an overview of rape in Malaysia. All Women's Action Society; 2002. p. 208.
- Colombini M, Mayhew S, Watts C. Health sector responses to intimate partner violence in low- and middle-income settings: a review of current models, challenges and opportunities. *BWHO* 2008;**86**:635–42.
- McCauley J, Yurk RA, Jenckes MW, Ford DE: inside "Pandora's Box": abuse women's experiences with clinicians and health services. *JGIM* 1998;**13**:549–55.
- Hamberger LK, Ambuel B, Marbella A, Donze J. Physician interaction with battered women. *JAMA* 1998;**7**:576–82.
- Feder GS, Hutson M, Ramsay J, Taket AR. Women exposed to intimate partner violence: expectations and experiences when they encounter health care professionals: a meta-analysis of qualitative studies. *Arch Intern Med* 2006;**166**:22–37.
- Wong TW, Chung MM, Yiu JJ. Attitudes and beliefs of emergency department doctors towards domestic violence in Hong Kong. *J Emerg Med* 1997;**9**:113–6.
- Rodriguez MA, Szkupinski QS, Bauer H. Breaking the silence: battered women's perspectives on medical care. *Arch Fam Med* 1996;**5**:153–8.
- Mazza D, Dennerstein L, Garamszegi CV, Dudley EC. The physical, sexual and emotional violence history of middle-aged women: a community-based prevalence study. *MJA* 2001;**175**:199–201.
- Cohn F, Salmon ME, Stobo JD. *Confronting chronic neglect: the education and training of health professionals on family violence*. National Academy Press; 2002.
- Waaen J, Goodwin M, Spitz AM, Petersen R, Saltzman L. Screening for intimate partner violence by health care providers: barriers and interventions. *Am J Prev Med* 2000;**19**:230–7.
- Sugg NK, Inui T. Primary care physician's response to domestic violence: opening Pandora's Box. *JAMA* 1992;**267**:3157–60.
- Eastman BJ, Bunch SG. Providing services to survivors of domestic violence: a comparison of rural and urban service provider perceptions. *J Interpers Violence* 2007;**22**:465–73.
- Eastman BJ, Bunch SG, Williams AH, Carawan LW. Exploring the perceptions of domestic violence service providers in rural localities. *Violence Against Women* 2007;**13**:700–16.
- Goff H, Shelton AJ, Byrd TL, Parcel GS. Preparedness of health care practitioners to screen women for domestic violence in a border community. *Health Care Women Int* 2003;**24**:135–48.
- Hinderliter D, Doughty AS, Delaney K, Pital CR, Campbell J. The effect of intimate partner violence education on nurse practitioners' feelings of competence and ability to screen patients. *J Nurs Educ* 2003;**42**:449–54.
- Yonaka L, Yoder MK, Darrow JB, Sherck JP. Barriers to screening for domestic violence in the emergency department. *J Contin Educ Nurs* 2007;**38**:37–45.
- Gutmanis I, Beynon C, Tutty L, Wathen CN, Mc Millan HL. Factors influencing identification of and response to intimate partner violence: a survey of physicians and nurses. *BMC Public Health* 2007;**7**:12–22.
- Rodriguez MA, Sheldon WR, Bauer HM, Perez-Stable EJ. The factors associated with disclosure of intimate partner abuse to clinicians. *J Fam Pract* 2001;**50**:338–44.
- Gerbert B, Caspers N, Bronstone A, Moe J, Abercrombie P. A qualitative analysis of how physicians with expertise in domestic violence approach the identification of victims. *Ann Intern Med* 1999;**131**:578–84.
- Sugg NK, Thompson RS, Thompson DC, Maiuro R, Rivara FP. Domestic violence and primary care: attitudes, practices, and beliefs. *Arch Fam Med* 1999;**8**:301–6.
- Minsky-Kelly D, Hamberger LK, Pape DA, Wolff M. We've had training, now what? Qualitative analysis of barriers to domestic violence screening and referral in a health care setting. *J Interpers Violence* 2005;**20**:1288–309.

37. Stinson CK, Robinson R. Intimate partner violence: continuing education for registered nurses. *J Contin Educ Nurs* 2006;**37**:58–62.
38. Catallo C, Wathen CN, Jamieson E, Freeman C, MacMillan H. *The McMaster university domestic violence education research team: professional education for responding to violence against women: review of current practices in Ontario's health sector*. Hamilton, ON: Offord Centre for Child Studies; 2006.
39. Bott S, Guedes A, Claramunt MC, Guezmes A. *Improving the health sector response to gender-based violence: a resource manual for health care professionals in developing countries*. New York: International Planned Parenthood Federation/Western Hemisphere Region (IPPF/WHR); 2004.
40. Morrison A, Ellsberg M, Bott S. *Addressing gender-based violence in the Latin American and Caribbean region: a critical review of interventions*. Washington, DC: World Bank; 2004.
41. Othman S, Adenan NZM. Domestic violence management in Malsysia: a survey on the primary health care providers. *Asia Pac Fam Med* 2008;**7**:2–9.