The relationship between healthcare providers’ performance regarding women experiencing domestic violence and their demographic characteristics and attitude towards their management

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Abstract:
Background: Domestic violence (DV) can threaten women’s health. Healthcare providers (HCPs) may be the first to come into contact with a victim of DV. Their appropriate performance regarding a victim of DV can decrease its complications. The aim of the present study was to investigate the relationship between HCPs’ performance regarding women experiencing DV, demographic characteristics, and attitudes towards their management.

Methods: In this cross-sectional study, 300 emergency and maternity HCPs were selected using quota random sampling from February to May 2016. All hospitals affiliated to Isfahan University of Medical Sciences (Iran), which are referral centers for DV cases, were selected according to a census. The inclusion criteria included 1 year or more of professional experience and at least 1 encounter with a woman experiencing DV. Data were collected using a researcher-made questionnaire. SPSS was used to analyze the data. Cronbach’s alpha was utilized to assess the reliability of the questionnaire. In order to obtain a general description of the data (variables, mean, and standard deviation), the table of frequencies was designed. Moreover, to determine the relationships between variables, chi-square test was applied.

Results: The results showed that there were no associations between HCPs’ performance regarding DV and their demographic characteristics except their age, professional experience, and economic status. However, there was a significant association between HCPs’ attitudes towards providing services (P=0.017) and their performance regarding women experiencing DV (P less than 0.001).

Conclusions: To improve HCPs’ performance regarding DV, paying attention to other related factors (i.e., training, employing HCPs with high professional experience, and codifying guidelines) is essential. Moreover, elements which result in the creation of positive attitudes and taking care of DV victims should be encouraged.

Introduction

Physical domestic violence (DV) is any intentional use of physical force by a family member which may lead to the death, disability, and injury of the victim. DV is an important and widespread public health problem. It may lead to physical, sexual, and mental disorders. The World Health Organization (WHO) has...
reported that 35% of women worldwide have experienced physical and sexual violence. Moreover, 45%, 60%, and 24.3% of women in India, Bangladesh, and the United States, respectively, are suffering from physical DV committed by their spouses.3-5

Some studies have reported the rate of DV in different parts of Iran such as Marivan (32.9%), Sabzevar (78.1%),6 and Tehran (10.7%). It is estimated that the rate of death resulting from DV among women of over 18 years of age is about 36%.7 Consequently, with regard to the exclusive role of healthcare providers (HCPs), especially those working in emergency and maternity wards, in identifying and intervening in DV,8 they may be the first to come into contact with a victim of DV. Their appropriate performance in terms of measures such as evaluation, intervention, documentation, reference, and follow-up may help reduce damages and improve victims’ circumstances. It may also help decrease DV in Iran as well as the world.9-12

Some studies have been carried out on HCPs’ performance regarding DV, regardless of factors affecting it.13,14 Despite the importance of DV and its complications, it seems that no studies have been conducted on HCPs’ performance and factors affecting clinical practice regarding women experiencing DV in Iran. It is assumed that attitudes and demographic characteristics of HCPs may affect their performance when encountering DV victims.15-18 Accordingly, the aim of the present study was to investigate the relationship between HCPs’ performance regarding women experiencing domestic violence, their demographic characteristics, and their attitude towards the management of these cases. This study may help to identify some effective factors on HCPs’ performance, and thus, the health of women and mothers.

Methods

In the present cross-sectional study, the performance of HCPs working in the emergency and maternity wards of 10 hospitals of Isfahan (Iran) was evaluated from February to May 2016. All hospitals affiliated to Isfahan University of Medical Sciences, which are referral centers for DV cases, were selected according to a census. Out of 796 HCPs, 300 were selected using quota random sampling according to the inclusion criteria. Based on the proportion of the number of eligible HCPs per center relative to the total eligible population, the participants consisted of 42 physicians, 46 midwives, and 212 nurses. The inclusion criteria included 1 year or more of professional experience and at least 1 encounter with a woman experiencing DV. In this research, random sampling method was performed using a random number table; the number of the staff in each hospital was calculated using quota sampling method, based on the amount of staff with inclusion criteria in each center in proportion to the total amount of studied personnel.

The data for the present study were collected through a self-administered questionnaire developed by the researcher. It was based on international guidelines regarding DV and consisted of 3 sections; demographic information (9 items), performances evaluation (5 sections, 35 items), and HCPs’ attitudes towards performance regarding DV victims (i.e., care and support of a DV victim is a professional task) (8 items). The 5 sections of the performance evaluation included assessment (performances regarding physical and mental assessment) (12 items), intervention (performances regarding physical and mental treatment) (7 items), documentation (recording all information on the victim and the services provided for her) (8 items), reference (performances regarding referral of victims to appropriate services) (4 items), and follow-up (following the victim through phone calls or revisits) (4 items). Sections 2 and 3 of the questionnaire were scored based on a 5-point Likert scale (1 = strongly agree, 2 = agree, 3 = no comment, 4 = disagree, and 5 = strongly disagree). Before calculating the sum of the scores, the score of negative questions was reversed. The content validity of the questionnaire was delineated through the use of judgments of experts. To determine quantitative face validity, impact score was used and important items were kept. To determine quantitative content validity, content validity ratio (CVR) (≥ 0.99) and content validity index (CVI) (≥ 0.79) were used. To assess the reliability of the questionnaire, a pilot study was performed on 20 subjects selected from the same study population; these subjects were excluded from the study. The reliability of the questionnaire was confirmed with a Cronbach’s alpha of at least 0.75. Finally, the questionnaires were distributed among the participants to be completed in the presence of the researcher, in their spare time with previous coordination.

To analyze the data obtained through the administration of the questionnaire, they were entered into SPSS software (version 20.00, IBM Corporation, Armonk, NY, USA). In order to obtain a general description of the data, descriptive statistics (i.e., mean and standard deviations) were calculated for each subcategory of the questionnaire. Furthermore, chi-square test ($\chi^2$) was used to determine the associations of HCPs’ performance with their demographic characteristics and attitudes. Scores of $<$ 50%, 50-75%, and $>$ 75% in different sections of the HCP’ performance regarding DV form were, respectively, considered as low, moderate, and high. To assess
HCPs' attitude, it either was considered negative (<50%) or positive (≥ 50%).

Results

The response rate was 100%, and 300 questionnaires were analysed. The age of the participants ranged from 24 to 50 years (mean = 34.34, SD = 5.98). The majority of the participants (75%) were women with a mean professional experience of 9.10 years (SD = 6.12). All of the participants (75%) were women with a mean proportion of DV cases during their professional experience (mean = 54.00, SD = 15.00). Other demographic characteristics are presented in Table 1. According to the results, the performance of HCPs was evaluated in 5 items (assessment, intervention, documentation, reference, and follow-up). Assessment, intervention, and reference were at moderate levels. Documentation was at a high level, while follow-up was at a low level. The results of this study show significant relationships between some demographic characteristics (i.e., age, professional experience, and economic status) and performance levels of HCPs (P<0.050) (Table 1). Table 2 shows HCPs' attitude towards performance regarding DV. Based on the results, there was a significant relationship between HCPs' performance and their attitudes towards performance regarding DV (P<0.001, χ² = 42.57) (Table 3).

Discussion

The present study is the first in Iran to evaluate the associations between HCPs' demographic characteristics and their attitude towards performance regarding DV. The mean number of participants who came into contact with victims of DV was 25.29. No previous research was found to have estimated this number of HCPs encountering DV victims. However, a survey carried out in Hamburg (Germany) reported a range from 1 to 2 cases per year. Another study conducted in Lebanon reported that physicians encountered DV cases with a prevalence of 0.5% to 70% during their professional career.

Table 1: Association between healthcare providers' performance and their demographic characteristics (n = 300).

| Performance level | Demographic characteristics | Low n (%) | Moderate n (%) | High n (%) | Total n (%) | P-value |
|-------------------|-----------------------------|-----------|---------------|-----------|-------------|---------|
| Age (year)        |                             |           |               |           |             |         |
| 20-30             |                             | 29 (9.70) | 57 (19.00)    | 7 (2.30)  | 93 (3.00)   | χ² = 0.031 |
| 30-40             |                             | 38 (12.70)| 108 (36.00)   | 16 (5.30) | 162 (54.00) | χ² = 10.53 |
| > 40              |                             | 10 (3.30) | 24 (8.00)     | 11 (3.70) | 45 (15.00)  |         |
| Gender            |                             |           |               |           |             |         |
| Female            |                             | 59 (19.70)| 139 (46.30)   | 27 (9.00) | 225 (75.00) | χ² = 0.930 |
| Male              |                             | 22 (7.30) | 45 (15.00)    | 8 (2.70)  | 75 (25.00)  | χ² = 0.14 |
| Marital status    |                             |           |               |           |             |         |
| Married           |                             | 51 (17.00)| 141 (47.00)   | 30 (10.00)| 222 (74.00) | P = 0.18 |
| Single            |                             | 21 (7.00) | 46 (15.30)    | 3 (1.00)  | 71 (23.70)  | χ² = 6.30 |
| Other             |                             | 3 (1.00)  | 3 (1.00)      | 1 (0.30)  | 7 (2.30)    |         |
| Education         |                             |           |               |           |             |         |
| Associate degree  |                             | 4 (1.30)  | 5 (1.70)      | 1 (0.30)  | 10 (3.30)   |         |
| Bachelor's degree |                             | 23 (7.70) | 135 (45.00)   | 54 (18.00)| 212 (70.70) | P = 0.440 |
| Master's degree   |                             | 10 (3.30) | 23 (7.70)     | 3 (1.00)  | 36 (12.00)  | χ² = 5.87 |
| Doctorate         |                             | 6 (2.00)  | 33 (11.00)    | 3 (1.00)  | 42 (14.00)  |         |
| Field of study    |                             |           |               |           |             |         |
| Medicine          |                             | 9 (3.00)  | 26 (8.70)     | 7 (2.30)  | 42 (14.00)  | P = 0.410 |
| Nursing           |                             | 56 (18.70)| 131 (43.70)   | 25 (8.30) | 212 (70.70) | χ² = 4.01 |
| Midwifery         |                             | 13 (4.30) | 31 (10.30)    | 2 (0.70)  | 46 (15.30)  |         |
| Economic status   |                             |           |               |           |             |         |
| High              |                             | 30 (10.00)| 51 (17.00)    | 10 (3.30) | 91 (30.30)  | P = 0.024 |
| Moderate          |                             | 44 (14.70)| 122 (40.70)   | 10 (3.30) | 176 (58.70) | χ² = 11.15 |
| Low               |                             | 4 (1.30)  | 20 (6.70)     | 9 (3.00)  | 33 (11.00)  |         |
| Work experience (year) |               |           |               |           |             |         |
| 1-5               |                             | 8 (2.70)  | 48 (16.00)    | 18 (6.00) | 74 (24.70)  |         |
| 5-10              |                             | 15 (5.00)| 115 (38.30)   | 21 (7.00) | 151 (50.30) | P = 0.024 |
| 10-15             |                             | 10 (3.30)| 21 (7.00)     | 2 (0.70)  | 33 (11.00)  | χ² = 14.68 |
| > 15              |                             | 11 (3.70)| 25 (8.30)     | 6 (2.00)  | 42 (14.00)  |         |
| Referred women    |                             |           |               |           |             |         |
| < 20              |                             | 45 (15.00)| 97 (32.30)    | 15 (5.00) | 157 (52.30) | P = 0.480 |
| 20-50             |                             | 18 (6.00)| 61 (20.30)    | 8 (2.70)  | 87 (29.00)  | χ² = 5.53 |
| 50-80             |                             | 9 (3.00) | 21 (7.00)     | 5 (1.70)  | 35 (11.70)  |         |
| > 80              |                             | 5 (1.70) | 12 (4.00)     | 4 (1.30)  | 21 (7.00)  |         |

*DV: Domestic violence
Table 2: Healthcare providers’ attitudes towards performance regarding domestic violence.

| Attitude type | Items                                                                 | A/SA* | D/SD* | Total |
|---------------|-----------------------------------------------------------------------|-------|-------|-------|
|               | Helping a woman experiencing DV is the duty of every human being.     | 276 (92.00) | 24 (8.00) | 300 (100) |
|               | Care and support for a DV victim is not a professional task.          | 24 (8.00) | 276 (92.00) | 300 (100) |
|               | In spite of the dissatisfaction of the family of a woman experiencing DV, we should take supportive and therapeutic measures. | 280 (93.30) | 20 (6.70) | 300 (100) |
|               | Planning for the treatment and protection of women experiencing DV is a waste of national treasure. | 67 (22.30) | 233 (77.70) | 300 (100) |
|               | Receiving high-quality care and support services is the right of every DV victim. | 263 (87.70) | 37 (12.30) | 300 (100) |
|               | Physical and psychological evaluation of a woman experiencing DV and her family is necessary. | 267 (89.00) | 33 (11.00) | 300 (100) |
|               | Women should not be educated about ways to prevent violence against them. | 23 (7.70) | 277 (92.30) | 300 (100) |
|               | Performing therapeutic and supportive measures in a hospital can reduce DV. | 252 (84.00) | 48 (16.00) | 300 (100) |

*A/SA: Agree/strongly agree; D/SD: Disagree/strongly disagree

Table 3: Association between healthcare providers’ performance and their attitude towards performance regarding domestic violence.

| Performance level | Attitude score | Positive n (%) | Average n (%) | Negative n (%) | Total n (%) |
|-------------------|----------------|----------------|---------------|---------------|-------------|
|                   | Attitude towards performance regarding DV |                 |               |               |             |
| Low               | 15 (5.00) | 8 (2.70) | 3 (1.00) | 26 (8.70) |
| Moderate          | 33 (11.00) | 41 (13.70) | 5 (1.70) | 79 (26.30) |
| High              | 106 (35.30) | 76 (25.30) | 13 (4.30) | 195 (65.00) |
| Total             | 154 (51.30) | 125 (41.70) | 21 (7.00) | 300 (100) |
| P-value/χ²        | P < 0.001, χ² = 42.57 |

According to Table 1, although most HCPs presented an average level of performance, the highest level of performance was observed in HCPs older than 40 years old. The findings of the study showed that there was a significant association between work experience and HCPs’ performance (P<0.05). As it is demonstrated, most HCPs with a high level of performance had a work experience of over 15 years. However, there was no association between the number of DV victims HCPs’ encountered and their performance. The results of the present study are in line with similar studies showing an association between older age and higher work experience on the understanding of and sense of responsibility towards social damages. In contrast to the results of some studies showing that gender influenced HCPs’ performance and DV management, the findings of the present study showed no association between gender and HCPs’ performance. Accordingly, the participants’ performance in the present study might be related to lack of a DV practical protocol rather than gender differences, so a national protocol can be suggested.

The outcomes of the current study demonstrated that there was a relationship between HCPs’ economic status and performance. The results of the present study are in line with similar studies showing an association between economic status and healthcare services. In addition, based on the results, there were no relationships between other demographic characteristics and HCPs’ performance regarding DV. Consequently, it seems that most demographic characteristics can affect the performance of HCPs; other factors may be related to their performance.

With regard to the impact of other factors such as the healthcare system, resources and facilities, and leadership and management on HCPs’ performance, it is necessary to take other factors into consideration to improve HCPs’ performance regarding DV. In order to improve HCPs’ performance, performing more research-
es, reforming policies, and training and practicing can be suggested.

Additionally, HCPs’ competence, skills, and attitudes should be enhanced. Based on the results of the present study, HCPs who had a positive attitude towards performance regarding DV presented the highest level of performance; these results are in line with the results of other studies. Nevertheless, the study conducted in Lebanon showed contrasting results. They displayed that physicians’ attitudes towards the support of battered women were negative. Physicians preferred DV management to be limited to treating physical injuries. Moreover, they believed DV was a private and family issue. Such attitudes, common in Lebanon as well as in Sudan, Pakistan, and Jordan, are culture-bound behaviors. Furthermore, a study carried out in England showed that despite HCPs’ positive attitudes towards performance regarding DV, their performance was not satisfactory. This can be due to the lack of self-confidence as well as poor knowledge in managing women experiencing abuse. Differences in attitudes towards performance regarding DV can result from cultural, social, political, historical, and religious differences as well as knowledge and perception of HCPs regarding DV. Therefore, to improve the attitudes, knowledge, and performance of HCP, it is necessary to train HCP and codify national guidelines on DV. Additionally, the factors creating positive attitudes towards desirable performance regarding DV should be strengthened.

In the present study, the variables influencing HCPs’ performance regarding DV were limited only to their attitudes and demographic characteristics. Due to the proximity of the concepts related to HCPs’ knowledge on DV and the items studied in the questionnaire, it was not possible to evaluate the factor of knowledge. Therefore, it can serve as an interesting area for future research.

Conclusions

The results of the present study displayed that there were no associations between HCPs’ performance regarding DV and their demographic characteristics except age, professional experience, and economic status. To improve HCPs’ performance regarding DV, training HCPs, employing those with high professional experience, and codifying guidelines on DV for all HCPs with different educational, economic status, age, and hospital positions is recommended. Moreover, factors creating positive attitudes towards performance regarding DV should be enhanced.

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References

1. Tenkorang EY, Owusu AY, Yeboah EH, Barnerman R. Factors influencing domestic and marital violence against women in Ghana. Journal of Family Violence. 2013;28(8):771-81.
2. World Health Organization. Global and regional estimates of violence against women: prevalence and health effect of intimate partner violence and non-partner sexual violence. Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine; South African Medical Research Council. 2013:2-33.
3. Dalal K, Lindqvist K. A national study of the prevalence and correlates of domestic violence among women in India. Asia Pac J Public Health. 2012 Mar;24(2):265-77.
4. Khatun T Mat, Rahman KF. Domestic violence against women in Bangladesh: analysis from a socio-legal perspective. BEJS. 2012;9(2):19.
5. National Center for Injury Prevention and Control Centers for Disease Control and Prevention. The National Intimate Partner and Sexual Violence Survey:2010, Summary Report, Atlanta, Georgia, 2011:1-113.
6. Moghaddam Hosseini V, Asadi ZS, Akaberi A, Hashemian M. Intimate partner violence in the eastern part of Iran: a path analysis of risk factors. Issues Ment Health Nurs. 2013 Aug;34(8):619-25.

7. Rasoulian M, Shirazi M, Nojomi M. Primary health care physicians’ approach toward domestic violence in Tehran, Iran. Med J Islam Repub Iran. 2014 Dec 14;28:148.

8. Vogel J. Effective gender-based violence screening tools for use in primary health care settings in Afghanistan and Pakistan: A systematic review. East Mediterr Health J. 2013 Mar;19(3):219-26.

9. Franchek K, Duncan L, Searle N. Clinical Guidelines for assessment and referral for victims of domestic violence: a reference for Utah health care providers: a reference for Utah health care, Salt Lake City, UT, 2008: health.utah.gov/vipp/pdf/DomesticViolence/HtmHlhTrmgMnl.pdf, accessed 7 October 2018.

10. Etheridge A, Gill L, McDonald J. Domestic violence toolkit for health care providers in BC. https://www.kpu.ca/sites/default/files/NEVR/DV%20Toolkit%20PDF%20August%2024.pdf, accessed 17 March 2018.

11. Feder G, Davies RA, Baird K, Dunne D, Eldridge S, Griffiths C, et al. Identification and Referral to Improve Safety (IRIS) of women experiencing domestic violence with a primary care training and support programme: a cluster randomised controlled trial. Lancet. 2011 Nov 19;378(9805):1788-95.

12. Nelson HD, Bougatsos C, Blazina I. Screening women for intimate partner violence: a systematic review to update the U.S. Preventive Services Task Force recommendation. Ann Intern Med. 2012 Jun 5;156(11):796-808.

13. Garcia-Moreno C, Hegarty K, d’Oliveira AF, Koziol-McLain J, Colombini M, Feder G. The health-systems response to violence against women. Lancet. 2015 Apr 18;385(9977):1567-79.

14. Othman S, Mat Adenan NA. Domestic violence management in Malaysia: a survey on the primary health care providers. Asia Pac Fam Med. 2008 Sep 29;7(1):2.

15. Kohler S, Hohne A, Ehhardt M, Artus J, Seifert D, Anders S. General practitioners and managing domestic violence: results of a qualitative study in Germany. J Forensic Leg Med. 2013 Aug;20(6):732-5.

16. Qasem HD, Hamadah FA, Qasem KD, Kamel MI, El-Shazly MK. Knowledge and attitude of primary health care staff screening and not screening for domestic violence against women. Alexandria Journal of Medicine. 2013;49(2):181-7.

17. Usta J, Feder G, Antoun J. Attitudes towards domestic violence in Lebanon: a qualitative study of primary care practitioners. Br J Gen Pract. 2014 Jun;64(623):e313-20.

18. Ramsay J, Rutterford C, Gregory A, Dunne D, Eldridge S, Sharp D, et al. Domestic violence: knowledge, attitudes, and clinical practice of selected UK primary healthcare clinicians. Br J Gen Pract. 2012 Sep;62(602):e647-55.

19. Mosadeghrad AM. Factors influencing healthcare service quality. Int J Health Policy Manag. 2014 Jul;3(2):77-89.

20. Williams I, Brown H. Factors influencing decisions of value in health care: a review of the literature. Health Service Management Center: University of Birmingham. 2014:1-20.

21. Vieira EM, Perdona GdCS, Almeida AMD, Nakano AMS, Santos MAD, Daltoso D, et al. Knowledge and attitudes of healthcare workers towards gender based violence. Rev. bras. epidemiol. 2009;12(4):566-77.

22. Nayak MB, Byrne CA, Martin MK, Abraham AG. Attitudes toward violence against women: a cross-nation study. Sex Roles. 2003;49(7-8):333-42.

23. AbuTaleb NJ, Daifl TA, Alasfour SM, Elshazly M, Kamel MI. Knowledge and perception of domestic violence among primary care physicians and nurses: a comparative study. Alexandria Journal of Medicine. 2012;48(1):83-9.