

Original Articles

Intimate partner violence against Iranian women

ABOLFAZL MOHAMMADBEIGI, MAHBOBEH SAJADI, ROBABEH AHMADLI,
AZADEH ASGARIAN, SALMAN KHAZAEI, SIMA AFRASHTEH, HOSSEIN ANSARI

ABSTRACT

Background. WHO has identified intimate partner violence (IPV) as a health priority as it has considerable consequences on the physical and psychological health of women. We aimed to evaluate the prevalence of IPV in women of one of the central cities of Iran in addition to examining the effect of a women's job and spousal addiction on IPV.

Methods. We did a cross-sectional study on 240 homemakers and nurse women, selected by a multistage random sampling method. Data were collected by a modified version of domestic violence CTS-2 of Straus questionnaire and were analysed by chi-square test and *t* test. Multivariate logistic regression was used to assess the predictors of physical IPV as the most important type of violence.

Results. The mean (SD) age of the women and their husbands was 33.1 (8) and 37.8 (8.7) years, respectively. Verbal (95.4%) and psychological (80.8%) violence were the most common while injury (14.6%) was the least prevalent. The prevalence of physical violence was 28.8%. Based on the regression model, economic problems, history of divorce in the woman's family and spousal addiction were the highest predictors of violence ($p < 0.05$).

Discussion. Spousal addiction was related to higher violence against women in physical, psychological and injury dimensions.

Increase of family support, removal of economic disparities and tackling drug addiction could be effective in decreasing violence.

Natl Med J India 2019;32:67–71

INTRODUCTION

Violence against women is a worldwide phenomenon. It is of public health importance and related to violation of women's rights. It affects millions of women around the world^{1,2} and occurs in various cultures, ethnicities, nationalities, religions, socio-economic classes and literacy levels.^{1,3} The United Nations has defined violence against women as any act in the form of physical, sexual or psychological harm or suffering to women in public or private life.⁴ It is classified into two parts—non-intimate or domestic violence (DV) and intimate partner violence (IPV).⁵ DV is the most common form of violence against women globally,⁶ and 1–3 of 5 women will experience a form of violence in their lifetime.⁷ According to the WHO report in 2013, almost a third (30%) of women in the world experienced DV, and in some areas it reached 38%.⁵ In Iran, the overall prevalence of DV against women is estimated to be 48.9%.⁸ According to Sahraian *et al.*, social violence is more than 80%; 73% of wives were regularly beaten by their husbands, and the rate of humiliation was estimated to be 77.2%.⁹ Based on a review article in Iran, the prevalence of DV varies based on the type of violence and is higher than 90% in types of physical, psychological and sexual assault. Moreover, 81.6% of DV victims encounter economic violence. A study by Kazemian *et al.*¹⁰ found that physical and psychological violence was experienced by 93% and 88% of women, respectively.

Nowadays, IPV in the community is a major obstacle to achieving Social Development Goals due to gender inequality.¹¹ IPV is a risk factor that has an adverse effect on various aspects of women's health, both directly and indirectly.^{5,12,13} In terms of sexual and reproductive health, it can increase the likelihood of problems including sexually transmitted diseases, pelvic inflammatory diseases, menopause, unwanted pregnancy, low birth weight, preterm labour, stillbirth and neonatal and perinatal death.^{5,13–18} IPV can lead to an increased risk of physical and mental illness as well as an increase in the tendency for risky behavioural disorders such as injury, suicide, suicidal attempts, substance abuse, drug abuse, cigarette and alcohol consumption and murders.^{5,13,14,16,19,20} DV is often not reported or under-reported because of social norms, stigma, taboo, fear, shame, revenge and its high sensitivity. Therefore, accurate data are difficult to obtain.^{13,20}

Neuroscience Research Center, Faculty of Health, Qom University of Medical Sciences, Iran

ABOLFAZL MOHAMMADBEIGI Department of Epidemiology and Biostatistics

Faculty of Nursing, Arak University of Medical Sciences, Arak, Iran
MAHBOBEH SAJADI Department of Nursing

Faculty of Nursing and Midwifery, Qom University of Medical Sciences, Qom, Iran

ROBABEH AHMADLI, AZADEH ASGARIAN Department of Nursing

Faculty of Public Health, Hamadan University of Medical Sciences, Hamadan, Iran

SALMAN KHAZAEI Department of Epidemiology

Faculty of Health, Bushehr University of Medical Sciences, Bushehr, Iran
SIMA AFRASHTEH Department of Public Health

Health Promotion Research Center, Faculty of Health, Zahedan University of Medical Sciences, Zahedan, Iran

HOSSEIN ANSARI Department of Epidemiology and Biostatistics

Correspondence to HOSSEIN ANSARI; ansarih88@gmail.com

© The National Medical Journal of India 2019

Women in developing countries are more affected by DV than those in developed countries.²¹ The prevalence of IPV was highest in the WHO African, Eastern Mediterranean and South-East Asia Regions.⁵ Iran as a developing country is located in the eastern Mediterranean region of WHO where there are little reliable data on IPV.^{14,22} Based on the latest studies, it was found that family problems, belonging to a patriarchic family, accepting the act of violence and the types of reactions towards husband's violence were factors related to IPV. In addition, spousal addiction and the wife's job were also related to experiencing IPV besides the educational level.²²⁻²⁵ An educated woman working as a nursing staff is expected to face less violence than a home-maker due to financial independence and higher socioeconomic status.^{23,24,26} Therefore, due to the high prevalence of IPV in Iran, we aimed to (i) estimate the prevalence of DV in Iranian women—home-makers and those employed (nurses); and (ii) compared the prevalence of IPV in women with husbands with and without history of substance use.

METHODS

This cross-sectional study was done on 240 married women in June 2014 in two phases to evaluate the prevalence of DV. The study setting was Qom, a metropolis in central Iran.²⁷ The first phase was done on a representative sample of married women who lived with their husbands as home-makers. In the second phase, the prevalence of DV was assessed in a random sample of women who were working outside their homes as nurses. The prevalence of violence in home-makers was compared with those working as nurses. One hundred and twenty home-makers and 120 married women nurses were enrolled in the study. The study groups were matched with respect to their ages and their husbands' ages within 2 years. All were residents of the district of Qom.

The first group included a representative sample of home-makers and the second group was representative of all married employed women (nurses), who were selected by the multistage random sampling method. For selecting the sample, first the urban areas of Qom were divided into four parts: north, south, east and west (geographical divisions) based on stratified sampling. Later, from each cluster, a healthcare centre was chosen randomly and the participants were selected on the basis of systematic sampling in that centre according to the household identification number. Primary healthcare was delivered to all women and their children free of charge and access to these cares had a high coverage.^{28,29} A random sample of home-makers referred to healthcare centres were considered as the first group. Married women working as nurses in two public and private hospitals of Qom were selected as the second group.

Being married and living with husbands in Qom were the inclusion criteria. Those who were unwilling to participate in the study were excluded. In addition, the prevalence of DV was estimated according to the participant's job and husband's opium use. This work was financially supported by Qom Welfare Organization, and the ethical committee of Qom University of Medical Sciences approved the study protocol. Verbal informed consent was taken from all participants in the study.

Data collection was done using a proforma and consisted of demographic questions and questions about the causes of violence beside the modified questionnaire of DV CTS-2, which was made by Strauss in 1996. The CTS-2 questionnaire included multiple-choice questions with Likert-scale format (never, low, medium and high).^{30,31} The CTS-2 questionnaire could measure different types of violence in women and men including physical,

psychological, verbal, economic, sexual and injury-type of violence. The economic subscale was added to our revision of CTS-2 questionnaire and we used the women CTS-2 questionnaire. The modified version of women CTS-2 questionnaire includes 43 questions about different types of violence: physical (12 questions), psychological (10 questions), verbal (6 questions), economic (4 questions), sexual (5 questions) and injury (6 questions). The mean scores of each sub-scale of the questionnaire were calculated based on the woman's experience of violence in the most recent years (yes 1 and no 0). The prevalence of DV is estimated based on the yes responses of participants in each subscale of the questionnaire. The reliability of this questionnaire was calculated by Cronbach's alpha coefficient for each sub-scale of the questionnaire and varied from 0.79 to 0.95. In addition, the content validity of the questionnaire has been evaluated and approved by experts in psychology, epidemiology and biostatistics. It has also been used in other Iranian studies as a reliable tool.^{32,33}

Data collection was done by a self-reported questionnaire that was distributed among the participants in both study groups. The data were analysed using SPSS software. For data analysis, Spearman's correlation coefficient, chi-square and *t* test were used. The level of significance was considered to be 0.05. The most important factors affecting physical violence among employed participants and home-makers were evaluated by multivariate binary logistic regression. Fitness of model was determined using the Hosmer–Lemeshow statistic and R-squared measure of goodness of fit (R^2) and Akaike information criterion.

RESULTS

The mean (SD) age of the participants was 33.1 (4.5) years and of their husbands was 37.8 (4.7) years. The mean (SD) duration of the participants' marriage was 12.6 (9) years (Table I). The mean (SD) parity was 1.7 (1.35). Overall, 43.8% of participants and 47% of their husbands had an academic background while 6.7% of husbands were using narcotic drugs. Consanguineous marriages occurred in 32% of participants. Financial problems were reported by 53.3% of participants and 26.7% of participants were living in rented homes.

Nearly all (98.8%) the participants were exposed to at least one type of violence. In addition, the prevalence of verbal and psychological violence was 95.4% and 80.8%, respectively. Moreover, physical violence occurred in 28.8% of participants, economic violence in 45%, sexual violence in 28.3% and injury-type violence in 14.6% of participants (Table II). There was no significant difference among employed women and home-makers ($p>0.05$). The mean scores of verbal, psychological and physical violence corresponded with the most frequent types of violence in the two groups (Table II). There was no significant difference between the mean scores of violence in all dimensions except in economic violence ($p>0.05$). The mean of economic violence in employed participants was approximately half that in home-makers and this difference was statistically significant ($p=0.02$). In addition, the higher prevalence of violence in different dimensions was observed in home-makers than in employed participants except in injuries that were higher in employed participants. Nevertheless, no significant difference was observed between the two groups ($p>0.05$). Physical, psychological violence and injury were significantly higher in participants whose spouses were addicted ($p<0.05$; Table III). There was no significant difference between participants with addicted and non-addicted husbands with regard to verbal, economic, sexual and overall violence.

A multivariate regression model was used to assess the predictive factors of physical violence against women (Table IV). It showed that financial hardship, a history of divorce in the woman's family and spousal addiction were the most important factors for physical violence. These results were achieved after control of some variables such as educational levels, age of spouse, length of marriage, accommodation or remarriage. Spousal addiction had the highest impact on physical violence, increasing

it four-fold. In addition, history of divorce in the woman's family and financial problems increased the chances of violence by three- and two-fold, respectively ($p < 0.05$).

DISCUSSION

Our study shows that nearly all the participants (98.8%) had experienced at least one type of violence in Qom, Iran. The results of another study in married women visiting Ahvaz's health

TABLE I. Demographic characteristics and the prevalence of different dimensions of violence in the participants

Variable	Total study population	Housewives	Professional nurse	p value
	Mean (SD)	Mean (SD)	Mean (SD)	
Age of women	33.12 (7.99)	32.21 (8.98)	34.0 (6.75)	0.073
Age of husband	37.75 (8.7)	37.24 (9.84)	38.27 (7.37)	0.361
Age at marriage	20.51 (4.2)	18.95 (3.60)	22.10 (4.27)	<0.001
Parity	1.7 (1.35)	1.98 (1.58)	1.43 (1.01)	0.002
Number of dead children	0.25 (0.85)	0.40 (1.11)	0.10 (0.40)	0.007
Duration of marriage	12.62 (8.99)	13.28 (9.86)	11.94 (8.01)	0.249
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	
Physical	69 (28.8)	35 (28.9)	34 (28.6)	0.952
Psychological	194 (80.8)	103 (85.1)	91 (76.5)	0.089
Verbal	229 (95.4)	118 (97.5)	111 (93.3)	0.116
Economic	108 (45)	61 (50.4)	47 (39.5)	0.089
Sexual	68 (28.3)	35 (28.9)	33 (27.7)	0.837
Injury	35 (14.6)	15 (12.4)	20 (16.8)	0.333
At least one form of violence	237 (98.8)	121 (100)	116 (97.5)	0.079

TABLE II. Comparison of the mean (SD) score and the prevalence of violence and its dimensions among employed and home-makers in the first phase

Type of violence	Housewives	Professional nurse	p value
	Mean (SD)	Mean (SD)	
Physical	4.5 (12.4)	5.3 (13.5)	0.640
Psychological	11.5 (11.15)	10.3 (11.36)	0.407
Verbal	20.5 (9.3)	19.5 (10.1)	0.392
Economic	4.1 (4.7)	2.7 (4.5)	0.021
Sexual	1.8 (3.7)	1.5 (3.2)	0.481
Injury	1.8 (6.3)	1.6 (5)	0.946
At least some form of violence	44.2 (28.9)	40.9 (29.6)	0.391
	<i>n (%)</i>	<i>n (%)</i>	
Physical	35 (28.9)	34 (28.6)	0.533
Psychological	103 (85.1)	91 (76.5)	0.062
Verbal	118 (97.5)	111 (93.3)	0.103
Economic	61 (50.4)	47 (39.5)	0.058
Sexual	35 (28.9)	33 (27.7)	0.475
Injury	15 (12.4)	20 (16.8)	0.216
At least some form of violence	121 (100)	116 (97.5)	0.120

TABLE III. Comparison of the prevalence of violence and the spouse's use of opium

Type of violence	Opium used, <i>n (%)</i>	Opium not used, <i>n (%)</i>	p value
Physical	9 (56.2)	60 (26.8)	0.016
Psychological	16 (100)	178 (79.5)	0.029
Verbal	16 (100)	213 (95.1)	0.460
Economic	9 (56.2)	99 (44.2)	0.249
Sexual	7 (43.8)	61 (27.2)	0.131
Injury	7 (43.8)	28 (12.5)	0.03
At least some form of violence	116 (100)	221 (98.7)	0.812

TABLE IV. Factors affecting physical violence in employees and home-makers based on logistic regression model

Variable	Beta coefficient (β)	Standard error of β	Adjusted OR (95% CI)	p value
Financial problems	0.699	0.307	2.01 (1.1–3.7)	0.023
History of divorce in the woman's family	1.38	0.333	3 (2.1–7.7)	0.001
Husband's addiction	1.44	0.556	4.2 (1.4–12.6)	0.009

centres, Iran, showed that prevalence of violence against women varied between 27% and 83%.³⁴ However, a study from India using a standard violence questionnaire showed a higher prevalence of physical and sexual violence (78%) than emotional violence (1.8%).⁷ Another large population-based cross-sectional survey in married women residing in urban Rasht (northern Iran) showed that 57.1% suffered psychological aggression, 27.6% physical abuse, 26.6% sexual abuse and 6.9% injury.²⁶ Another systematic review and meta-analysis in Iran showed that the prevalence of IPV was 66%. The geographical distribution of this study showed that the prevalence of DV was 70% in the east of Iran, 70% in the south, 75% in the west, 62% in the north and 59% in the central part of Iran.³⁵

According to our study, verbal and psychological violence were the most common types of violence. Since these types of violence are more subjective, these reports could be based on the perception of the woman and her expectation from life, knowing her rights and little knowledge about life skills.^{8,23,24} However, the estimated prevalence of violence in physical (28.8%), economic (45%), sexual (28.3%) and injury types (14.6%) was similar to the results of other studies in different cultures.^{25,36–40} Other studies showed the overall prevalence of DV against Iranian women to be 48.9%.⁸ In a study by Sahraian *et al.*, the prevalence of social violence was more than 80% and for humiliation, it was estimated to be 77.2%.⁹ Moreover, 81.6% of victims of DV encounter economic violence. Kazemian *et al.* reported that the prevalence of physical and psychological violence was 93% and 88%, respectively. In another study on infertile women in Iran, the prevalence of DV was estimated to be 61.8%.²⁵ It has been suggested that unintended pregnancy may also be related to DV.¹⁷ However, other studies both outside Iran^{7,16,38} as well as those conducted in other areas of Iran have reported lower prevalence of DV in comparison with our study.^{40–43} The discrepancies observed among results of various studies might be attributed to the religious and cultural context of the city of Qom, the mood and culture of men against women and a conservative approach of men towards women. Although Islam is opposed to any form of violence, in a study by Mahapatro *et al.* in India, it was shown that Muslim women are at greater risk of physical, psychological and sexual violence than women who were Buddhist, Christian or Hindu.⁴⁴ However, the effect of religion on DV against women requires further investigation.

The prevalence of physical and sexual violence in our study was 28.8% and 28.3%, respectively, which was about 50% lower than that of psychological violence. Three different studies in Pakistan, Iran and Northwestern Ethiopia^{38,42} indicated higher physical and sexual violence than our study. The lower prevalence of sexual and physical violence in our study may be due to under-reporting by women because of fear or shame. In addition, because beating women is a crime in Iran, violence in verbal, psychological and financial forms tends to increase because men fear facing prosecution for abusing their wives. Our study showed

that there was no significant difference between home-makers and professional nurses regarding different types of DV. Ardabili *et al.* showed similar results in Tehran, Iran.²⁵ Only the mean score of economic violence in employed participants was significantly lower than that of home-makers. Therefore, women's job or financial support can be an effective protective factor against violence. Other studies showed that participants' job was associated with violence and participants who were unemployed experienced more violence than those employed in government or those who were self-employed.^{1,39,40} This may be due to unemployed women's financial dependence on their spouses. Another study in 2012 in Jeddah, Saudi Arabia, showed that unemployed participants who were financially dependent were at nearly 1.5-fold risk of DV.¹⁶

We found that financial problems, a history of divorce in family of women and spousal addiction were important factors for DV. Shorey *et al.* found significant relationship between addiction of the husband to alcohol and drugs and DV.⁴⁵ The effect of spousal addiction to cigarettes, alcohol or narcotic drugs on DV has been reported in several studies.^{16,39,45–47} Another study from South Africa⁴⁸ showed that alcohol consumption, aggravated by the other partner and lack of family support were factors contributing to violence. On the other hand, good economic situation and emotional support by wife's family were protective factors for DV against women. Similar to our study, some studies report a significant relationship between family income and DV.^{38,43,47}

Although we could estimate the prevalence of DV and its various dimensions, it seems that due to some problems in marital and sociological dimensions, the prevalence of violence has been underestimated.^{24,25,34} According to the society's cultural structure and the acknowledged helplessness in Iranian women and mothers' sense of forgiveness, many cases of violence against women, particularly in discussions of emotional, psychological, financial and especially sexual violence could not be reported.^{14,34,39} However, to obtain valid data, we tried to establish trust and a friendly relationship with women. One of the limitations of our study was the fear of mothers in revealing their responses and fear of further violence by their husbands, a concern that we tried our best to dispel by assuring them that the information would remain confidential. Future studies should study the effect of religious, legal and cultural differences in different areas, especially on high-risk groups of women. Life skills training, especially problem-solving skills, anger control and effective relationships in men are necessary to reduce violence. Moreover, assessment of the impact of DV on children's performance and future perception could be evaluated in longitudinal studies.

Conclusion

The prevalence of DV against women in the city of Qom seems to be high. Women's job was not related to violence prevalence except in economic violence. Nevertheless, spousal addiction was related to higher violence against women in the form of

physical, psychological and injury violence. Poverty, addiction and divorce were the three most important predisposing social factors of violence against women. Due to the existence of positive correlation between mental health and problem-solving skills, anger control and dealing with emotions, life skills training can be an effective factor in reducing violence in the family. Therefore, development of life skills education in all groups of society such as women, young people and mothers should be essential.

ACKNOWLEDGEMENTS

We are grateful to the Research Vice-chancellor of Qom University of Medical Sciences as well as to all the women who participated in the study. This study was financially supported by Qom Welfare Organization.

Conflicts of interest. None declared

REFERENCES

- Aduloju PO, Olagbuji NB, Olofinbiyi AB, Awoleke JO. Prevalence and predictors of intimate partner violence among women attending infertility clinic in South-Western Nigeria. *Eur J Obstet Gynecol Reprod Biol* 2015;**188**:66–9.
- García-Moreno C, Jansen H, Ellsberg M, Heise L, Watts C. *WHO Multi-country study on women's health and domestic violence against women*. Geneva:World Health Organization; 2005:205.
- Hammoury N, Khawaja M, Mahfouz Z, Afifi RA, Madi H. Domestic violence against women during pregnancy: The case of Palestinian refugees attending an antenatal clinic in Lebanon. *J Womens Health (Larchmt)* 2009;**18**:337–45.
- Assembly UG. *Declaration on the elimination of violence against women*. New York:UN General Assembly; 1993.
- World Health Organization. *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva:World Health Organization; 2013.
- Krantz G, Van Phuong T, Larsson V, Thi Bich Thuan N, Ringsberg KC. Intimate partner violence: Forms, consequences and preparedness to act as perceived by healthcare staff and district and community leaders in a rural district in northern Vietnam. *Public Health* 2005;**119**:1048–55.
- Pasi A, Hanchate M, Pasha M. Infertility and domestic violence: Cause, consequence and management in Indian scenario. *Biomed Res* 2011;**22**:255–8.
- Kharazmi A, Armanmehr V, Moradi N, Bagheri P. Systematic review and meta-analysis of the lifetime prevalence of domestic violence against women in Iran. *Asian Women* 2015;**31**:77–97.
- Sahraian A, Ghanizadeh A, Hashemi SH, Mohammadi MR, Ahmadzadeh L. Prevalence and predictors of domestic-violence towards wives by their psychiatric hospitalized husbands. *Iran J Psychiatry* 2015;**10**:233–8.
- Kazemain M, Razaghi H, Toufani H, Nemati Z. Six month study on traumatized women due to wives abuse: Case of Kamyab hospital emergency department in Mashhad city. *J Shahrekord Univ Med Sci* 2005;**14**:235–9.
- Kaur R, Garg S. Addressing domestic violence against women: An unfinished agenda. *Indian J Community Med* 2008;**33**:73–6.
- Krantz G, Garcia-Moreno C. Violence against women. *J Epidemiol Community Health* 2005;**59**:818–21.
- Moyer VA, U.S. Preventive Services Task Force. Screening for intimate partner violence and abuse of elderly and vulnerable adults: U.S. Preventive services task force recommendation statement. *Ann Intern Med* 2013;**158**:478–86.
- Taherkhani S, Negarandeh R, Simbar M, Ahmadi F. Iranian women's experiences with intimate partner violence: A qualitative study. *Health Promot Perspect* 2014;**4**:230–9.
- Schuilung KD, Likis FE. *Women's gynecologic health*. Burlington, Massachusetts:Jones & Bartlett Publishers; 2011.
- Fageeh WM. Factors associated with domestic violence: A cross-sectional survey among women in Jeddah, Saudi Arabia. *BMJ Open* 2014;**4**:e004242.
- Beygi A, Salehi N, Bayati A. Prevalence of unintended pregnancy and its related factors in Arak 2007. *Koomesh* 2009;**10**:Pe201–6.
- Rajaeefard A, Mohammad-Beigi A, Mohammad-Salehi N. Estimation of natural age of menopause in Iranian women: A meta-analysis study. *Koomesh* 2011;**13**:Pe1–7.
- Butchart A, Garcia-Moreno C, Mikton C, World Health Organization. *Preventing intimate partner and sexual violence against women: Taking action and generating evidence*. Geneva:World Health Organization; 2010.
- Mallik S. Violence against women: Just a social issue or a global public health concern? *Indian J Public Health* 2014;**58**:75–7.
- Blanchfield L, Margesson R, Salaam-Blyther T, Serafino NM, Sun Wyler L. *International violence against women: US response and policy issues*. Washington, D.C.:Congressional Research Service; 2011.
- Vakili M, Nadrian H, Fathipoor M, Boniadi F, Morowatisharifabad MA. Prevalence and determinants of intimate partner violence against women in Kazeroon, Islamic Republic of Iran. *Violence Vict* 2010;**25**:116–27.
- Pournaghash-Tehrani S. Domestic violence in Iran: A literature review. *Aggress Violent Behav* 2011;**16**:1–5.
- Atef Vahid MK, Ghahari S, Zareidoost E, Bolhari J, Karimi-kismi E. The role of demographic and psychological variables in predicting violence in victims of spouse abuse in Tehran. *Iranian J Psychiatry Clin Psychol* 2011;**16**:403–11.
- Ardabili HE, Moghadam ZB, Salsali M, Ramezanzadeh F, Nedjat S. Prevalence and risk factors for domestic violence against infertile women in an Iranian setting. *Int J Gynaecol Obstet* 2011;**112**:15–17.
- Ahmadi R, Soleimani R, Jalali MM, Yousefnezhad A, Roshandel Rad M, Eskandari A, *et al.* Association of intimate partner violence with sociodemographic factors in married women: A population-based study in Iran. *Psychol Health Med* 2017;**22**:834–44.
- Mohammadbeigi A, Moshiri E, Mohammad-salehi N, Ansari H, Ahmadi A. Dyslipidemia prevalence in Iranian adult men: The impact of population-based screening on the detection of undiagnosed patients. *World J Mens Health* 2015;**33**:167–73.
- Rejali M, Mohammadbeigi A, Mokhtari M, Zahraei SM, Eshtrati B. Timing and delay in children vaccination; evaluation of expanded program of immunization in outskirts of Iranian cities. *J Res Health Sci* 2015;**15**:54–8.
- Zahraei SM, Eshtrati B, Gouya MM, Mohammadbeigi A, Kamran A. Is there still an immunity gap in high-level national immunization coverage, Iran? *Arch Iran Med* 2014;**17**:698–701.
- Straus MA, Hamby SL, Boney-McCoy S, Sugarman DB. The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *J Fam Issues* 1996;**17**:283–316.
- Straus MA. The conflict tactics scales and its critics: An evaluation and new data on validity and reliability. In: Straus MA, Gelles RJ. *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families*. New Brunswick, NJ:Transaction Publishers, 1990.
- Khalkhali SM, Najafi K, Ahmadi R, Yousefnezhad A, Hamidi A, Ellahi M, *et al.* Domestic violence in methamphetamine psychotic users, psychiatric inpatients, and healthy people: A Comparative study. *Iran J Med Sci* 2016;**41**:486–93.
- Asadi S, Mirghafourvand M, Yavarikia P, Mohammad-Alizadeh-Charandabi S, Nikan F. Domestic violence and its relationship with quality of life in Iranian women of reproductive age. *J Fam Violence* 2017;**32**:453–60.
- Nikbakht Nasrabadi A, Hossein Abbasi N, Mehrdad N. The prevalence of violence against Iranian women and its related factors. *Glob J Health Sci* 2014;**7**:37–45.
- Hajnasiri H, Ghanei Gheshlagh R, Sayehmiri K, Moafi F, Farajzadeh M. Domestic violence among Iranian women: A Systematic review and meta-analysis. *Iran Red Crescent Med J* 2016;**18**:e34971.
- Yildizhan R, Adali E, Kulusari A, Kurdoglu M, Yildizhan B, Sahin G, *et al.* Domestic violence against infertile women in a Turkish setting. *Int J Gynaecol Obstet* 2009;**104**:110–2.
- Moghadam Z, Ardabili H, Salsali M, Ramezanzadeh F, Nedjat S. Physical and psychological violence against infertile women. *J Fam Reprod Health* 2010;**4**:65–7.
- Semahegn A, Belachew T, Abdulahi M. Domestic violence and its predictors among married women in reproductive age in Fagitalekoma Woreda, Awi zone, Amhara regional state, North Western Ethiopia. *Reprod Health* 2013;**10**:63.
- Hajian S, Vakilian K, Mirzaei Najm-abadi K, Hajian P, Jalalian M. Violence against women by their intimate partners in Shahrud in Northeastern region of Iran. *Glob J Health Sci* 2014;**6**:117–30.
- Jamshidimanesh M, Soleymani M, Ebrahimi E, Hosseini F. Domestic violence against pregnant women in Iran. *J Family Reprod Health* 2013;**7**:7–10.
- Nouhjah S, Latifi SM, Haghghi M, Eatesam H, Fatholahifard A, Zaman N, *et al.* Prevalence of domestic violence and its related factors in women referred to health centers in Khuzestan Province. *J Kermanshah Univ Med Sci* 2011;**15**:278–86.
- Arefi M. A descriptive study of violence against women in Urmia, Iran. *Psychosoc Stud Women* 2003;**1**:101–20.
- Balali Meybodi F, Hassani M. Prevalence of violence against women by their partners in Kerman. *Iran J Psychiatry Clin Psychol* 2009;**15**:300–7.
- Mahapatro M, Gupta R, Gupta V. The risk factor of domestic violence in India. *Indian J Community Med* 2012;**37**:153–7.
- Shorey RC, Febres J, Brasfield H, Stuart GL. The prevalence of mental health problems in men arrested for domestic violence. *J Fam Violence* 2012;**27**:741–8.
- Babu BV, Kar SK. Domestic violence in Eastern India: Factors associated with victimization and perpetration. *Public Health* 2010;**124**:136–48.
- Gokler ME, Arslantas D, Unsal A. Prevalence of domestic violence and associated factors among married women in a semi-rural area of Western Turkey. *Pak J Med Sci* 2014;**30**:1088–93.
- Jewkes R, Levin J, Penn-Kekana L. Risk factors for domestic violence: Findings from a South African cross-sectional study. *Soc Sci Med* 2002;**55**:1603–17.