Original Article

Comparison of associated factors of domestic violence against women by their husbands based on demographic characteristics and life skills in Iran

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Abstract:

BACKGROUND: In recent decades, the prevention of domestic violence against women (DVAW) has been considered a priority for women's health in many countries. Identifying factors related to DVAW by their husbands or intimate partner can promise prevention and decrease in prevalence. The objective of this study was to examine and compare associated factors of domestic violence based on demographic characteristics and some life skills.

MATERIALS AND METHODS: This cross-sectional study was conducted in Abadan, Iran. 640 couples completed questionnaires including demographic characteristics, communication skills, anger management, and problem-solving skill. In addition, women completed the questionnaire on domestic violence. Data were analyzed using descriptive statistics (*t*-test and one-way analysis of variance) and multiple linear regression.

RESULTS: Approximately 57% of the women in this study have been subjected to psychological violence in their lifetime by their husbands. The result of multiple regression indicated that demographic characteristics had a very small contribution to explaining domestic violence (R^2 = 0.03) and only the education level of women was identified as a key predictor of domestic violence. The result of multiple regression based on life skills among couples demonstrated that communication skills and anger management of couples were inversely and significantly associated with domestic violence and these variables explained 51% of the variance in domestic violence.

CONCLUSIONS: Empowering couples with anger management and communication skills can play an important role in decreasing domestic violence. Therefore, developing and planning educational interventions by policymakers and health care providers seems necessary for couples.

Keywords:

Domestic violence, life skills, women

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Introduction

In recent decades, violence against women has been considered the most serious social problem around the world, because it has been identified as a threat to the health of women and family members.[1,2] Violence against women includes any gender-based act that results in or is likely to result in, physical, sexual or psychological harm to women, actions that are painful for women, or forced deprivation of individual or social freedom.[3,4] The most common violence against women is violence perpetrated by a husband or male intimate partner, which is referred to as domestic violence.[5,6]

According to a report of the World Health Organization (WHO) in 2018, data of 161 countries show that about 26% of women

around the world have been subjected to physical and/or sexual violence by their husband or intimate partner at least once in their lifetime and 38% of murders of women are committed by intimate partners.[7] In Iran, the prevalence of domestic violence against women (DVAW) has been reported 31% by their husbands in their lifetime.[7] Furthermore, according to a review study in Iran, the prevalence of violence varies in different regions of the country.[8] In a research conducted in Abadan, the prevalence of violence was reported 71% in married women.[9]

Multiple studies have demonstrated that violence against women can be led to an increase in physical problems, mental and emotional health disorders such as depression, fear, anxiety, posttraumatic stress, alcohol consumption, and an increase in suicides among women.[7,10,11] In addition, DVAW can have deleterious consequences, including the inability to play their role in the family and regulate their personal and social functions, and an adverse effect on the children of women subjected to domestic violence.[12,13] Violent actions are patterns of behaviors that are internalized by new generations in the process of socialization and passed on to other generations.[5,14]

In recent decades, identifying effective factors to prevent the occurrence of DVAW in many countries has been considered and investigated as a priority for women's health. For example, the results of a study in India showed that low economic status, living in rural areas, low level of education, and more family members have a positive and significant relationship with the prevalence of spousal violence against women.[1] A study in Spain also found that childhood violence, unemployment, and immigration among women were significantly associated with the likelihood of intimate partner violence.[15] A study in Turkey found that education level, personal income, marital status, health status, and the number of children were significantly related to domestic physical violence.[6] In studies conducted, only demographic characteristics have been studied and couples' life skills have not been considered in predicting violence against women.

Life skills are a set of skills and abilities that help people to cope with life's challenges and realities effectively. These skills enable people to adopt positive behaviors, know themselves better, manage emotions, improve their interpersonal relationships, and solve problems that consequently prevent or reduce domestic violence.[16,17]

Therefore, the role of couples' life skills along with demographic characteristics in explaining domestic violence should be examined. The objective of this study was to investigate and compare associated factors of DVAW based on demographic characteristics and some life skills including communication skills, problem-solving skills, and anger management. Identifying these factors can be used for developing educational programs by health care providers and policymakers.

Materials and Methods

Study design and setting
This cross-sectional study was performed in 2019 in Abadan, Iran. This research was performed in 10 health centers randomly selected.

Study participants and sampling
The participants were recruited from married women and their husbands referring to health centers of Abadan. From 24 health centers in this city, 10 health centers were randomly selected and then couples were recruited using a convenience method from these centers. The sample size was calculated based on the pervious study in Iran and considered 700 couples.[18]

In this study, inclusion criteria were Couples living in Abadan and willing to participate in this study. Those not meeting inclusion criteria were excluded from the study and there were no other exclusion criteria. After selecting the samples, the research team described the objectives of the research and its procedures.

Data collection and technique
At the first, data were collected using a questionnaire of demographic information including age, education, occupation, and duration of marriage in couples and then using the following questionnaires.

Domestic violence was measured using the Wife abuse and battering scale that was developed and validated by Haj-Yahia.[19] This scale has 32 items that reflect four subdomains of domestic violence. Sixteen items reflect psychological violence, 11 items assess physical violence, three items measure sexual violence, and two items assess economic violence. The 32 items were rated on a 3-point scale including 1 (never), 2 (sometimes), and 3 (more times). Overall scores range between 32 and 96 and higher scores reflect greater domestic violence. The validity and reliability of this scale have been confirmed by previous research.[20] In the present study, Cronbach's alpha coefficients were 0.9, 0.9, 0.83, and 0.7 for psychological, physical, sexual, and economic violence, respectively.

The communication skills were measured using the instrument developed and validated by Dastan *et al*.[21] and this scale has been used in other studies.[22,23] This scale contains 32 items rated on 5-point scale from

1 (strongly disagree) to 5 (strongly agree). The item scores are summed into an overall score that ranges between 32 and 160. Higher scores reflect having better communication skills. In the current study, Cronbach's alpha values were 0.89 and 0.9 for women and husbands, respectively.

Problem-solving ability was measured by problem-solving inventory (PSI) developed by Heppner and Petersen (1982) and validated.[24] The PSI contains 32 items rated on a six-point scale from 1 (strongly agree) to 6 (strongly disagree). The item scores are summed into an overall score that ranges between 32 and 192. Higher scores indicate negative perceptions of one's problem-solving ability. Validity and reliability of this scale have been confirmed in the Persian version.[25] In the present study, Cronbach's alpha values were 0.81 and 0.8 for women and husbands, respectively.

The Anger Management Questionnaire belongs to the violence prevention program used by Hubal and *et al*.[26] This measure has 8 items rated on a 5-point scale from (1 = Strongly disagree) to (5 = Strongly agree). Higher scores indicate a greater ability to manage anger. This scale has evidence of validity and reliability in the previous study.[27] In the present study, Cronbach's alpha values were 0.83 and 0.86 for women and husbands, respectively.

Couples who had been referred to health centers (10 centers) to receive health services were selected and voluntarily participated in this study. After selecting the samples, trained health care providers serving in these health centers described the objectives of the research and obtained their consent. Data were collected by health care providers via face-to-face interviews. All interviews were conducted in a private room without the presence of another person. They were assured that this information would be remained confidential. Questionnaire of the skills and violence to women and only Questionnaire of skills to men were provided. The participants with missing data were excluded from data analysis. After eliminating incomplete questionnaires, 640 couples ($N = 1280$) were included in this study.

Ethical consideration

This study was approved by the Research Committee of Tehran University of Medical Sciences (IR.TUMS.SPH. REC.1398.098). Participants signed the written consent form and completed questionnaires in health centers.

Statistical analysis

Data were analyzed using SPSS, version 21 (IBM Corp., Armonk, NY, USA). Descriptive statistics were presented as number, percentage, mean, and standard deviation. Independent sample *t*-test and one-way analysis of variance were used to compare dependent and independent variables among groups. The multiple linear regression analyses were performed to predict domestic violence based on independent variables including demographic characteristics and life skills.

Results

Overall, 640 couples were included in this study. About 50% of women were aged 25–34 years and the mean age in women was 33 (8.9) as well as the mean age of their husbands was 37.3 (9.5). The most of women were homemakers and their husbands were employed. The mean marital duration was 10.7 (9.5). Demographic characteristics of participants and the mean score of DVAW based on demographic variables are presented in Table 1. The most common form of violence was psychological violence 56.5% and physical violence and sexual violence were 29.1%, 12.7%, respectively.

The mean score DVAW was higher in women aged 25–34 years, with lower education levels, and marital duration <15 years.

Table 1: Comparison domestic violence against women based on demographic characteristics

Variables	*n* (%)	Mean±SD	Test	P
Women's age				
≤24	79 (12.3)	37.58±8.5	4.34[†]	0.002
25-34	328 (51.3)	46.89±23.7		
35-44	167 (26.1)	44.69±21.89		
45-54	45 (7)	39.28±16.5		
≥55	21 (3.3)	37.85±16.5		
Marital duration				
≤5	208 (32.5)	44.07±21.19	4.71[†]	0.003
6-10	170 (26.6)	46.85±23.85		
11-15	127 (19.8)	47.3±23.53		
≥16	135 (21.1)	38.78±14.84		
Women's education				
Lower of diploma (<12)	280 (43.8)	47.55±24.29	3.26[‡]	0.001
Diploma and upper (≥12)	360 (56.2)	41.83±18.29		
Women's occupation				
Housewife	544 (85)	44.87±22.05	1.8[‡]	0.07
Employed	96 (15)	41.3±17.03		
Husband's age				
≥24	24 (3.8)	34.58±4.69	3.11[†]	0.01
25-34	248 (38.8)	44.59±21.07		
35-44	252 (39.4)	46.6±23.54		
45-54	72 (11.2)	42.72±20.26		
≥55	44 (6.8)	37.86±14.15		
Husband's education				
Lower of diploma (<12)	240 (37.5)	45.53±22.34	1.09[‡]	0.27
Diploma and upper (≥12)	400 (62.5)	43.62±20.81		
Husband's occupation				
Employed	606 (94.7)	44.55±21.62	1.37[‡]	0.17
Unemployed	34 (5.3)	40.44±16.73		

[‡]*t*-test, [†]One-way ANOVA. SD=Standard deviation

In addition, the mean score DVAW was higher in their husbands aged 35–44 years. Table 2 shows the mean scores of life skills among women subjected to domestic violence compared to others. There were significant differences for the mean scores manage anger, problem-solving, and communication skills among women subjected to violence than others.

Results of the multiple linear regression analysis based on demographic variables are presented in Table 3. In this regression analysis, the key predictor of domestic violence only was women's education, and demographic variables had a small role in explaining domestic violence. In table 4, results of the multiple linear regression analysis based on life skills indicated that the most important predictors were communication skills and anger management in couples respectively. These variables explained 51% of the variance in DVAW. There was no significant association between problem-solving skills in couples with DVAW.

Discussion

The preliminary results of this study indicated that the experience of psychological violence is more common in married women than physical and sexual violence by their husbands. Approximately 57% of the women in this study have been subjected to psychological violence in their lifetime. This result is consistent with the results of other studies in Iran (57.1% in Ahmadi *et al*. and 44.4% in Jahromi *et al*.).[28,29] Also, in other research in Spain was identified that psychological violence is more common than other forms of violence by an intimate partner.[15]

In the current study, 29% of married women have been subjected to physical violence by their husbands in their lifetime. This result is comparable to reports published by WHO on the prevalence of physical violence by intimate partners around the world in 2018.[7] A study in New Zealand found that 30% of women experienced physical violence at least once in their lifetime.[30] The rate of sexual violence in this study was lower than other forms of violence which this result is similar to

other studies in Turkey and Spain.[3,15] It seems that with the cultural changes of the society, the perpetration of physical violence has decreased but psychological violence has increased. The higher prevalence of psychological violence may be due to a lack of awareness of individuals about Criminalization and examples of psychological violence as well as a lack of stricter laws on psychological violence compared to physical violence.

In addition, these findings demonstrated that the rate of experience of domestic violence is higher in married women aged 25–34 years than in other age groups, but the age of women was not identified as a predictor of violence. This finding is in line, in part, with the results of other studies conducted in India and Ethiopia. The results in these studies showed that women aged 25–35 years were at higher risk of violence by their husbands and the age of women was a predictor of violence.[1,2] In this age range, women are involved in many responsibilities such as caring for children, housekeeping, and providing family comfort with poor experiences. Excessive workload, lack of cooperation and participation of husbands, lack of facilities, poor communication skills can increase the risk of domestic violence.

Moreover, it was found that husbands aged 25–44 years had more violence against women, but the age of husbands was not identified as a risk factor in explaining domestic violence.

This result is in line with a study by Jahromi *et al*.[29] This age range is a period of productive activities for men in which long and hard working hours, economic problems, inability to provide facilities and welfare of the family, inability to meet the demands of the children may cause despair and domestic violence.

In the present study, women with a marital duration of more than 15 years reported less violence compared to women with a marital duration of fewer than 15 years, but the duration of the marriage was not determined as a predictor of domestic violence. These results are

Table 2: Comparison life skills of women and their husbands

Skills, mean±SD	Domestic violence		Range	*t*-test	*P*
	No	**Yes**			
Women					
Anger management	34.83±5.55	25.25±9.1	8-40	15.70	0.001
Communication skills	133.02±13.72	108±29.5	32-160	13.73	0.001
Problem-solving	73.16±19.79	104.19±26.26	32-192	−16.36	0.001
Husbands					
Anger management	35.30±5.37	24.40±10.36	8-40	17.27	0.001
Communication skills	133.88±13.68	104.2±31.89	32-160	15.96	0.001
Problem-solving	71.82±20.04	106.53±28.77	32-192	−17.97	0.001

SD=Standard deviation

Table 3: Predictive factors of domestic violence based on demographic characteristics

Variables	B	SE B	β	t	P	R²
Women's age	−0.07	0.16	−0.5	−0.43	0.63	0.03
Husband's age	0.03	0.15	0.03	0.24	0.8	
Women's education	−3.06	1.37	−0.12	−2.22	0.02	
Husband's education	−2.02	1.36	−0.7	−1.48	0.13	
Women's occupation	0.49	1.69	0.01	0.29	0.77	
Husband's occupation	1.03	2.49	0.02	0.41	0.67	
Marital duration	−0.12	0.14	−0.1	0.87	0.38	

β=Standardized coefficient of regression, *B*=Unstandardized coefficient of regression, SE B=Unstandardized standard error

Table 4: Predictive factors of domestic violence based on life skills

Variables	B	SE B	β	t	P	R²
Anger management skill in women	-0.38	0.09	-0.20	-4.25	0.001	
Communication skills in women	-0.16	0.04	-0.27	-4.64	0.001	
Problem solving skill in women	0.03	0.04	0.05	0.91	0.36	0.51
Anger management skill in husbands	-0.17	0.08	-0.09	-2.04	0.04	
Communication skills in husbands	-0.17	0.03	-0.29	-4.93	0.001	
Problem solving skill in husbands	0.03	0.04	0.05	0.85	0.37	

partially consistent with studies conducted in Iran and Nigeria that women with a marital duration of more than 15 years were less exposed to violence.[29,31] This reduction in violence may be due to a decrease in life stress as the children grow up or leave home and the couple approaches middle age and old age.

It was revealed that the education level of women was inversely associated with domestic violence by their husbands and only the education level of women was identified as a key predictor of domestic violence based on demographic characteristics of couples. This finding is consistent with the results of other studies in India, Turkey, Peru, Spain, and Iran, as the education level of women decreased, the rate of exposure to violence increased by their husbands or intimate partners.[1,6,12,15,18] These results suggest that education is a protective factor for women that contributes to safety against domestic violence. The high education level of women improves their skills, employability, and socio-economic status and consequently reduces the risk of violence.

The results of the present study revealed that no significant relationship was found between the employment of women and the rate of domestic violence by their husbands. This finding is similar to the results of a study in Myanmar.[32] Contrary to this result, a study in Spain found that women's unemployment increased the likelihood of violence by intimate partners.[15] In

other research in Peru was found that employed women were at higher risk of experiencing intimate partner violence.[12] In some families, couples have to work to meet the family's economic needs, so the unemployment of women may increase the likelihood of domestic violence. In some other families, there are gender and cultural attitudes in men, so their wives' employment increases the probability of domestic violence. In other cases, employed women who do not have enough time to do housework or care for their children, support, participation of husbands, and regularities in managing the house may experience the risk of domestic violence.

In the present study, the employment and education of husbands were not associated with DVAW. Similarly, Jahromi *et al.* found no relationship between husbands' employment and domestic violence.[29] Inconsistent with our results, in some studies, low education level and unemployment of husbands are risk factors of DVAW.[3,28] These different results in men show that domestic violence is not linearly related to education and occupation and can be related to other factors such as culture, personality traits, life skills, and other factors.

In this study, some life skills were compared among married women with and without experience of violence. The results showed that there were significant differences in the mean scores for communication skills, anger management, and problem-solving skills among women without and with experience of violence.

Furthermore, there were significant differences in the mean scores for communication skills, anger management, and problem-solving skills among husbands of women without and with experience of violence.

The results of regression analysis indicated that the communication skills of couples were inversely and significantly associated with domestic violence and were identified as the most important predictors of domestic violence. Enache in Romanian couples concluded that the level of satisfaction of couples was related to the level of intercommunication in couples.[33]

Having communication skills reduces tensions between couples and at least postpones them to a better time. Furthermore, researchers report that familiarizing couples with communication skills and the exchange of thoughts and feelings through verbal and nonverbal exchanges when problems arise can be effective in preventing or reducing cases of DVAW.[16,17,34] In addition, we observed a significant inverse relationship between anger management and domestic violence. Previous studies have demonstrated that anger management training programs for controlling negative emotions and

substituting appropriate responses can manage anger and reduce violence against women.[17,35,36]

In this study, no significant relationship was found between couples' problem-solving skills and domestic violence. However, the study results of Alamshahi *et al.* showed that problem-solving skill training program in women has a significant effect on reducing conflict between couples.[37] Furthermore, Taghizadeh *et al.* reported that problem-solving skill training in women has a significant effect on reducing physical and psychological violence.[38] Problem-solving skill is the ability to identify effective coping solutions, organize, evaluate and make decisions.[39] Overall, communications kills and anger management in couples explained 51% of the variance in domestic violence, while demographic characteristics had a very small contribution to explaining domestic violence.

These results suggest that having communication skills and anger management among couples can be effective in reducing husbands' domestic violence.

Limitations and recommendation
This study has several limitations. First, the cross-sectional nature of this study constrains identifying causal relationships between violence against women with related factors. Second, the data were collected using the self-reported questionnaires and participants may have been exaggerated in answering some of the questions to further express their difficult situation, or to hide their problems due to embarrassment and reputation.

Third, participants were selected of women referring to health centers in a city. Accordingly, these samples could not be representative of women in society. Therefore, the results of this study should be interpreted and generalized with caution. Future studies should examine associated factors with violence against women in different areas of Iran and other countries.

Conclusions

The study results demonstrated that psychological violence was more common than physical and sexual violence against women by their husbands. Communication skills and anger management of couples as well as women's education were identified as the most important predictors for explaining domestic violence by their husbands. The demographic characteristics had a much smaller contribution to predicting violence against women than skill variables. These results indicated that strengthening communication skills and anger management among couples can lead to a reduction in domestic violence by their husbands. Therefore, it is suggested that policymakers plan and implement pre- and post-marital life skills training courses for couples. It is also suggested that health care providers design and implement communication skills and anger management training interventions for couples in health centers to prevent and decrease domestic violence.

Conflicts of interest
There are no conflicts of interest.

References

1. Das T, Basu Roy DT. More than individual factors; is there any contextual effect of unemployment, poverty and literacy on the domestic spousal violence against women? A multilevel analysis on Indian context. SSM Popul Heal 2020;12:100691.
2. Chernet AG, Cherie KT. Prevalence of intimate partner violence against women and associated factors in Ethiopia. BMC Womens Health 2020;20:22.
3. Sen S, Bolsoy N. Violence against women: Prevalence and risk factors in Turkish sample. BMC Womens Health 2017;17:100.
4. Moazen B, Salehi A, Soroush M, Vardanjani HM, Zarrinhaghighi A. Domestic violence against women in Shiraz, South-western Iran. J Inj Violence Res 2019;11:243-54.
5. Alkan Ö, Tekmanlı HH. Determination of the factors affecting sexual violence against women in Turkey: A population-based analysis. BMC Womens Health 2021;21:188.
6. Alkan Ö, Ünver Ş. Determinants of domestic physical violence against women in Turkey. Hum Soc Sci Rev 2021;8:55-67.
7. World Health Organization. Violence against Women: Prevalence Estimates. Vol. 1. Geneva: World Health Organization; 2018. p. 1-112.
8. Hajnasiri H, Gheshlagh RG, 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.
9. Fakharzadeh L, Tahery N, Heidari M, Moadab NH, Zahedi A, Elhami S. Factors associated with prevalence of domestic violence in women referred to abadan health centers in 1394. Iran J Epidemiol 2018;13:328-36.
10. Devries K, Watts C, Yoshihama M, Kiss L, Schraiber LB, Deyessa N, *et al*. Violence against women is strongly associated with suicide attempts: Evidence from the WHO multi-country study on women's health and domestic violence against women. Soc Sci Med 2011;73:79-86.
11. Dillon G, Hussain R, Loxton D, Rahman S. Mental and physical health and intimate partner violence against women: A review of the literature. Int J Family Med 2013;2013:313909.
12. Castro RJ, Cerellino LP, Rivera R. Risk factors of violence against women in Peru. J Fam Violence 2017;32:807-15.
13. Vakily M, Noroozi M, Yamani N. Comparing the effect of group-based and compact disk-based training on midwives' knowledge and attitude toward domestic violence in women of reproductive age. J Educ Health Promot 2017;6:70.
14. Franklin CA, Kercher GA. The intergenerational transmission of intimate partner violence: Differentiating correlates in a random

community sample. J Fam Violence 2012;27:187-99.

15. Sanz-Barbero B, Barón N, Vives-Cases C. Prevalence, associated factors and health impact of intimate partner violence against women in different life stages. PLoS One 2019;14:e0221049.

16. Okey-Orji S, Ekenedo G, Chibuzo AN. Life skills acquisition: A panacea for domestic violence among adolescents in Nigeria. 2019;10:1-14.

17. Taghdisi MH, Estebsari F, Dastoorpour M, Jamshidi E, Jamalzadeh F, Latifi M. The impact of educational intervention based on empowerment model in preventing violence against women. Iran Red Crescent Med J 2014;16:e14432.

18. Hajian S, Vakilian K, Mirzaii Najm-abadi K, Hajian P, Jalalian M. Violence against women by their intimate partners in Shahroud in northeastern region of Iran. Glob J Health Sci 2014;6:117-30.

19. Haj-Yahia M. Implications of wife abuse and battering for self-esteem, depression, and anxiety as revealed by the second palestinian national survey on violence against women. J Fam Issues 2000;21:435-63.

20. Adib-hajbaghery M, Karimi R, Karbasi H. Comparing violence against women with and without an addicted spouse in Kashan, Iran. Addict Health 2015;7:74-81.

21. Dastan N, Rajabi G, Konesh AK, Mehr RK. Development and validation of communication skills scale for men and women in Tehran. J Psychol Methods Model 2010;1:27-38.

22. Zarei E, Mirzaei M, Sadeghifard M. Providing a model to determine the role of communication skills and problem solving skills in preventing from mental and social damages by mediated family conflicts. Q Couns Cult Psychother 2018;9:1-26.

23. Ghanbari E, Zadeh FA, Amirazodi N, Alam AA. The effect of communication skills on sexual satisfaction with the mediatory effect of personality traits among individual filing for divorce in shiraz. International Journal of Psychology and Behavioral Sciences 2017;7:83-9.

24. Hepner PP, Petersen CH. The development and implications of a personal problem solving inventory. J Couns Psychol 1982;29:66-75.

25. Yaghoobi S, Motevalli S. Structural equations modeling of tendency to critical thinking, problem solving skills and self-esteem among students. Int J Med Invest 2020;9:174-90.

26. Hubal RC, Fishbein DH, Sheppard MS, Paschall MJ, Diana L, Hyde CT. How do varied populations interact with embodied conversational agents? Findings from inner-city adolescents and prisoners. Comput Hum Behav 2009;24:1104-38.

27. Azarnioshan B, Naderi H, Shojaee AA, Asghariganji A. The mediating role of resilience in the relationship between perceived parenting styles and anger management. Int J Sch Health 2019;6:4-9.

28. Ahmadi R, Soleimani R, Jalali MM, Yousefnezhad A, Rad MR, Eskandari A. Association of intimate partner violence with sociodemographic factors in married women: A population-based study in Iran. Psychol Health Med 2017;22:834-44.

29. Jahromi MK, Jamali S, Koshkaki AR, Javadpour S. Prevalence and risk factors of domestic violence against women by their husbands in Iran. Glob J Health Sci 2015;8:175-83.

30. Fanslow J, Hashemi L, Malihi Z, Gulliver P, McIntosh T. Change in prevalence rates of physical and sexual intimate partner violence against women: Data from two cross-sectional studies in New Zealand, 2003 and 2019. BMJ Open 2021;11:e044907.

31. Adebowale AS. Spousal age difference and associated predictors of intimate partner violence in Nigeria. BMC Public Health 2018;18:1-15.

32. Kabir R, Haque M, Mohammadnezhad M, Samad N, Mostari S, Jabin S, *et al.* Domestic violence and decision-making power of married women in Myanmar: Analysis of a nationally representative sample. Ann Saudi Med 2019;39:395-402.

33. Enache RG. Study on the relationship between communication and marital attachment in Romanian families. Proc Soc Behav Sci 2013;84:811-4.

34. Erozkan A. The effect of communication skills and interpersonal problem solving skills on social self-efficacy. Kuram Uygulamada Egit Bilim 2013;13:739-45.

35. Sadagheyani HE, Tatari F, Raoufian H, Salimi P, Gazerani A. The effect of multimedia-based education on students' anger management skill. Educ Med 2021;22:149-55.

36. Bahrami E, Mazaheri M, Hasanzadeh A. Effect of anger management education on mental health and aggression of prisoner women. J Educ Health Promot 2016;5:5.

37. Alamshahi M, Olfati F, Shahsavari S, Aherpour M. The effectiveness of group counseling based on problem-solving on experiencing domestic violence among pregnant women: A clinical trial. Soc Health Behav 2020;3:62-9.

38. Taghizadeh Z, Pourbakhtiar M, Ghasemzadeh S, Azimi K, Mehran A. The effect of training problem-solving skills for pregnant women experiencing intimate partner violence: A randomized control trial. Pan Afr Med J 2018;30:79.

39. Ghasemi MG, Kordi M, Asgharipour N, Esmaeili H, Amirian M, Eskandarnia E. The effect of problem-solving skill training on mental health and the success of treatment of infertile women under intrauterine insemination treatment. J Educ Health Promot 2017;6:107.