



Social Determinants of Violence on Pregnant Women against Their Husbands

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ABSTRACT

Aims Domestic violence against men, an important issue in today's societies, can be exacerbated during a woman's pregnancy due to special bio-psychological conditions. Various factors, including social determinants of health, can influence this area, which requires further study. This study aimed to investigate the social determinants of pregnant women's violence against their husbands.

Instruments & Methods This cross-sectional study was carried out on 206 pregnant women's husbands who were referred to the prenatal centers in Tehran during 2018-2019. The subjects were selected using the available sampling method. Data were collected using demographics and the Conflict Tactile Scale-2 questionnaires. Data were analyzed using SPSS 21 software using T student Kruskal Wallis and analysis variance tests through the statistical significance of $p < 0.05$.

Findings The results showed a significant relationship between age ($p=0.004$), husbands' age ($p < 0.001$), marriage age ($p=0.004$), husbands' marital age ($p=0.003$), housing situation ($p=0.009$), men and women marital satisfaction ($p=0.001$ and $p=0.008$ respectively), women's perceived psycho-receiving emotional support from husbands ($p=0.008$), men and women unwanted pregnancy ($p=0.017$ and $p=0.01$ respectively), house ownership ($p=0.01$), and smoking by pregnant women ($p=0.016$) with pregnant women's use of violence against their husbands.

Conclusions Regarding the various factors associated with the violence perpetrated by pregnant women against their husbands, it is important to consider the appropriate psychological and educational interventions in prenatal care services to reduce the severity and frequency of violence by pregnant women against men, after providing solutions to involve men to identifying the effective factors.

Keywords Pregnancy; Violence; Health; Social Determinant of Health

CITATION LINKS

[1] The effect of the same concepts and definition of couple in marital ... [2] Husband abuse: Case study of married men ... [3] Male victims of domestic abuse: Implications for health ... [4] The sociological analysis of females' violence ... [5] Conceptual model of underlying factors in women ... [6] Sociocultural and legal aspects of violence against ... [7] A cross-sectional study of gender-based ... [8] The national intimate partner and sexual violence ... [9] Domestic violence against man: Where are we around ... [10] Impact of intimate partner violence against ... [11] The relationship between wife abuse and mental health ... [12] Characteristics of intimate partner violence ... [13] Social determinants of intimate partner violence ... [14] Factors contributing to domestic ... [15] Prevalence and determinants of common Perinatal mental ... [16] Mental health of pregnant women referred ... [17] Married men's experiences of domestic violence ... [18] Epidemiology of husband abuse in Fars province ... [19] Prevalence and risk factors for domestic violence against ... [20] The revised conflict tactics scales (CTS2) ... [21] The relationship between dimensions of domestic violence ... [22] Prevalence of and factors associated with male Perpetration ... [23] Cigarette smoking among intimate partner violence ... [24] Gender-specific differences in risk for intimate partner ... [25] Social support factors associated with Psychological resilience ... [26] Domestic violence, unwanted pregnancy and pregnancy ... [27] Unintended pregnancy and intimate partner violence around ... [28] Unintended pregnancy causing nascent violence ... [29] Domestic violence and abortion among rural women ...

Introduction

The family is the fundamental institution of society, formed through marriage to gain peace and create suitable conditions for the growth and prosperity of individuals [1]. However, domestic violence is a phenomenon that undermines and sometimes destroys healthy family relationships [2]. Domestic violence, one of the social harms, is still manifested in all physical, mental, sexual, verbal, and emotional forms. Despite cultural differences between different societies and human intellectual and cultural development, domestic violence can be seen in different societies [3, 4]. Although domestic and marital violence is a complex social problem, which in addition to causing serious consequences in the physical and mental health of the individual, also have many social and economic costs. However, it has not been properly reported in most countries, and some aspects of domestic violence are still known as normal behaviors [5].

On the other hand, considering the stereotypes, there is a common belief that domestic or marital violence or gender-based violence is generally perpetrated by men against women. This has led to less attention to women's violence than to men's. Also, men are less inclined to report violence against themselves because of stereotypes [6]. However, few studies on the actual rate of domestic violence against men; Malik et al. revealed that 51.5% of men experienced violence by their partner at least once, and 10.5% of them have been abused by their partner for the past 12 months [7]. The researchers in a national survey in the United States also found that more than 33% of American men have been victims of violence by their partners during their lifetime and a majority of them experienced violence before 25 years old [8]. Like violence against women, violence against men has different physical, sexual, psychological, and emotional dimensions [9], and it has consequences such as health problems, job loss, post-traumatic stress disorder, lack of independence, isolation, guilt, and shame, frustration feels, homelessness, and low self-esteem [10, 11]. Men abused by their wives often initially resort to reactions such as distancing themselves from their spouses and shouting. However, in the end, they try to be adapted to the situation and choose isolation. These men often hide their problems [12].

However, our knowledge of the main factors influencing violence is insufficient, and the social and cultural factors and the determinants of violence have been considered in few studies [13].

Social Determinants of Health (SDH) have been one of the controversial issues in recent years. These determinants include structural mechanisms and intermediate factors such as psychological, social, economic status, and even the health system. Since these determinants were also related to violence, the causes of violence should be assessed among these determinants [13]. Factors that appear to be

associated with violence against men include the age of men, age of women, duration of the marriage, occupation, and income, level of education, number of children, selection of a spouse, family and cultural status, and having physical and mental disorders. Other factors related to the violence are some crises in women's lives, such as pregnancy. Because in this period, the transition to the role of parenting brings new challenges for marital relationships [15]. Pregnancy is an experience that causes many physical, psychological, and social changes in pregnant women [16]. It seems that physiological and biological changes in pregnant women can be one of the causes of their violence against their husbands [5]. This problem can be developed through defensive reactions by men. Also, the husband's inattention to their wife's situation and excessive attention to the newborn can create an emotional vacuum in their wives and provide the ground for violent behaviors [17]. It is also believed that women's violence against their husbands can be defensive violence to survive and respond to their husbands' violence [5]. Other factors related to violence against men include lack of knowledge of responsibilities, loneliness, depression, hallucinations, anxiety, fear, lack of interest, and hatred [18].

Given that violence against men, like violence against women, threatens the family's foundation and special physical and mental conditions in women due to pregnancy, it can cause violence against women against their husbands. It is important to address the predisposing factors of violence against their husbands, especially during pregnancy. However, this issue has been less studied and researched. Therefore, this study aimed to identify the social determinants of violence of pregnant women against their husbands.

Instrument and Methods

This descriptive cross-sectional study was carried out on the pregnant women's husbands who were referred to the prenatal centers in 3 selected centers affiliated to the Iran University of Medical Sciences during 2018-2019. The centers were selected from the more crowded centers which issued the sampling permit. The subjects were selected by the available sampling method, and people who referred to the centers and were eligible entered the study voluntarily. Two hundred six people were selected according to a 95% confidence interval, 80% test power, and effect size of 0.201. inclusion criteria were lack of known physical or mental disease in couples and lack of neuropsychiatric drugs in pregnant women and their husbands. Data were collected by the demographic and the Tactile Scale-2 questionnaires created by Behboudi Moghadam *et al.* [19]. The demographic questionnaire was included the items of age, education level, economic status, receive emotional and psychological support, smoking, wanted pregnancy, marriage age, ethnicity, housing

status, marital satisfaction, religion, and occupation status. After reviewing the research background, this questionnaire was prepared, and its content validity was approved by several faculty members. The second questionnaire was the Conflict Tactics Scale (CTS2) questionnaire validated by Behboudi Moghaddam *et al.* [19]. Internal consistency of this scale, measured by Cronbach's alpha coefficient, was reported to be 0.79 for physical violence and 0.89 for psychological violence [20].

The validated version of the questionnaire includes 36 items to assess verbal, sexual, and emotional conflicts. According to society's culture, three items related to sexual violence were removed in this version, and the word of sexual partner was replaced by the word of a spouse. In this questionnaire, 4, 6, 12, 8 and, six items were used to examine the subscales of sexual violence, verbal violence, physical violence, psychological violence, and violence leading to harm, respectively. The correlation coefficient obtained in the study of Moghaddam *et al.* was 0.8. The items were scored using the Likert scale, including zero (never happened), 1 (once in the past year), 2 (twice in the past year), 3 (three to five times in the past), 4 (six to ten times in the past), 5 (eleven to twenty times in the past), 6 (more than twenty times in the past year) and 7 (did not happen last year but happened before). If the subject chooses the number 7 in the answer sheet, it will be scored in two ways: a) In order to obtain the subject score in each of the subscales, the scores of the related subscale are added together; b) If the prevalence of physical injury is concerned, the number 7 will be replaced by the number 1. The scores for each subscale are added together to obtain subjects' rates in each subscale. The maximum subscale score will be calculated using multiplying the number of subscale items by the highest score to obtain the severity. Then the subscale score from zero to maximum will be divided into three groups from low to high. If the subject's score is in the bottom, middle, and upper third, the subject is abused rarely, occasionally, and frequently. The internal correlation coefficient was 0.8, and the reliability of this questionnaire was confirmed by Cronbach's alpha of 0.9 [19]. After obtaining the permission of the Ethics Committee of Iran University of Medical Sciences and other legal permits to enter the sampling environments, the researcher introduced himself/herself to the officials of the research units and explained the importance of domestic violence in pregnancy, the aim of the research, and the methodology for the participants. First, the eligible people provided the informed consent form for participation in this study. The demographic and the CTS-2 questionnaires were

filled out by the subjects using the self-report method. Confidentiality of information was emphasized for couples, and the questionnaires were provided to people with inclusion criteria. Also, pregnant women whose husbands were not present received the questionnaires to be filled out by their husbands, and the questionnaire was then provided to the researcher in person or through social networks. Data were analyzed by SPSS 21 software using Independent T-test, Kruskal-Wallis, and analysis of variance considering the significant level less than 0.05.

Findings

The average age of the subjects was 33.63 ± 5.68 , and their marital age was 26.93 ± 4.95 . The average age of the subject's husbands was 29.66 ± 6.13 , and their marital age was 23.02 ± 5.79 years (Tables 1 and 2).

There was a significant relationship between age, marital age, housing status, men's satisfaction with marital life, unwanted pregnancy, and domestic violence ($p < 0.05$; Table 1).

The results of post hoc tests for the variables of age, marital age, housing status, and men's satisfaction with marital life showed that the mean score of violence in men aged under 30 was significantly lower than men aged 35-39, and this difference was not significant at other levels ($p > 0.05$). Also, violence was lower in men aged 20-24 than in men aged 25 and older. Men with high marital satisfaction were significantly less likely to be victims of domestic violence than men with poor and relatively good marital satisfaction. Also, men who owned a private home experienced domestic violence more than tenants (Table 1). The mean score of violence in women aged 20-24 was significantly lower than women aged 25 years, and this difference was not significant at other levels. In addition, women who smoked and had unwanted pregnancies were more violent than their husbands (Table 2).

Comparison of receiving emotional and psychological support from spouse and marital satisfaction showed that women who had unfavorable emotional and psychological support for their husbands abused their husbands significantly higher than women with good psychological and emotional support. This was also the same for women with unsatisfactory marital satisfaction than women with desirable and relatively desirable marital satisfaction (Table 2). The highest rate of violence by pregnant women against their husbands was related to verbal violence (2.29 ± 1.42), and the lowest rate was related to physical violence (0.020 ± 0.004), and 96.6% (199) of them rarely experienced violence (Table 3).

Table 1) Numeric indicators and test results of related factors of pregnant women's violence against their husbands regarding participant's demographic characteristics

Characteristics		Number	Percent	Test result
Age (year)	<30	48	23.2	F*=4.61
	30-34	79	38.3	P=0.004
	35-39	48	23.3	
	≥40	31	15	
Education	Under high school	55	26.7	P**=0.081
	High school and Diploma	68	23	
	University	83	40.3	
Economic Status	Good	21	10.2	F*=0.854
	Fair	135	65.5	P=0.427
	Bad	50	24.3	
Receiving emotional and psychological support from the spouse	Desirable	137	66.5	F*=2.125
	Relatively desirable	48	23.3	P=0.122
	Undesirable	21	10.2	
Smoking	No	96	46.6	t***=1.693
	Yes	110	53.4	P= 0.092
Wanted pregnancy	No	58	28.2	t***=2.406
	Yes	148	71.8	P= 0.017
Marital age (year)	<20	9	25.7	P**=0.004
	20-24	64	42.2	
	25-29	8	16.5	
	≥30	50	15.5	
Ethnicity	Fars	31	15.1	P**=0.815
	Turk	75	36.4	
	Others	100	48.5	
Housing Status	Owner	81	39.3	F*=4.794
	Renter	106	51.5	P=0.009
	Live with Relatives	19	9.2	
Marital satisfaction	Desirable	155	75.2	F*=14.659
	Relatively desirable	40	19.4	P=0.001
	Undesirable	11	5.3	
Religion	Shia	179	86.9	t***=0.699
	Sunni	27	13.1	P= 0.485
Occupation status	Non-occupied	9	4.4	t***=1.380
	Occupied	197	95.6	P= 0.25

*.ANOVA; **. Kruskal-Wallis; ***. Independent t test

Table 2) Numeric indicators and test results of related factors of pregnant women's violence against their husbands regarding participants' spouse's demographic characteristics

Characteristics		Number	Percent	Test result
Age (year)	<20	42	20.5	F*=9.58
	20-24	50	24.3	P=0.0001
	25-29	83	40.3	
	≥30	31	15	
Education	Under high school	22.4	46	P**=0.158
	High school and Diploma	36.6	75	
	University	41	84	
Receiving emotional and psychological support from the spouse	Desirable	130	63.1	F*=4.957
	Relatively desirable	64	31.1	P=0.008
	Undesirable	12	5.8	
Smoker	No	163	79.1	t***=2.433
	Yes	43	20.9	P= 0.016
Wanted pregnancy	No	61	29.6	t***=2.594
	Yes	145	70.4	P= 0.010
Marital age (year)	<25	53	25.7	P**=0.003
	25-29	87	42.2	
	30-35	34	16.5	
	≥35	32	15.5	
	Gravida	1	107	51.9
	2	55	26.7	P=0.686
	≥3	44	21.4	
Marital satisfaction	Desirable	147	71.4	F*=10.664
	Relatively desirable	39	18.9	P=0.008
	Undesirable	20	9.7	
Religion	Shia	90.3	186	t***=0.719
	Sunni	9.7	20	P= 0.473
Occupation status	Non-occupied	80.1	165	t***=1.154
	Occupied	19.9	41	P= 0.25

*.ANOVA; **. Kruskal-Wallis; ***. Independent t test

Table 3) Numeric indicators of subscales and total scores of pregnant women violence with their husbands

Violence subscales	Rarely		Occasionally		Frequently		Range	Mean±SD
	N	%	N	%	N	%		
Verbal	156	75.7	0	0	50	24.3	0-5.6	2.29±1.42
Physical	206	100	0	0	0	0	0-1	0.21±0.12
Psychological	136	66	0	0	70	34	0-5.25	1.08±0.96
Sexual	206	100	0	0	0	0	0-1	0.18±0.05
Physical violence leading to damage	206	100	0	0	0	0	0-0.17	0.02±0.004
Total score	199	96.6	2	1	5	2.4	0-1.53	0.67±0.34

Discussion

Among the demographic characteristics, age and marital age, marital satisfaction and wanted pregnancy in couples had a significant relationship with the violence of pregnant women against their husbands. In addition, it was associated with women smoking and receiving emotional support from their husbands. Younger women with lower marital ages were less likely to abuse their husbands during pregnancy than older women. Men aged less than 30 and those with lower marital age were also less likely to abuse their spouses. Other studies have suggested that domestic violence is associated with variables such as the age of the couple [21] so that the types of spousal abuse in the ages of 18-24 are lower than other age ranges [22]. It seems that this may be because these people are in the early years of their life together, and they are less likely to use violence. On the other hand, due to the lower age and education level, these women are more financially and socially dependent on their husbands, and this can increase their fear of losing their source of support and security and therefore have more obedience to their spouses.

Violence was higher in women who smoked than in other women. The association between smoking and violence and spousal abuse has been well reported in other studies [23, 24]. However, it is not clear whether smoking increases domestic violence. Conversely, women who experience some form of domestic violence are more likely to engage in risky behaviors because of issues such as depression and anxiety alongside or due to violence. Also, in the present study, the violence against the husband was lower in the pregnant women, how received emotional support from their husbands and had a desirable marital satisfaction. It is believed that social support reduces domestic violence [25]. It seems that people who have better emotional support and marital satisfaction are less prone to stress and psychological problems, and they have healthier relationships with their spouses, so they perpetrated less violence.

Other results of this study showed that domestic violence had a significant relationship with homeownership, so that violence in people who had a private home was significantly higher than in tenant women. Tenants are less likely to strain their interactions with their spouses because they have to respect their neighbors and fear causing a problem with their landlord. On the other hand, men who

cannot provide housing for their families due to financial inability seem to be less expectant and feel more committed to their wives, and they are more patient or perhaps less likely to report violence. However, the reason for this issue needs further study.

Wanted or unwanted pregnancies have a significant relationship with domestic violence so that the violence of pregnant women against their husbands was higher in couples with an unwanted pregnancy. The results of other studies, in this case, are contradictory; as Kamal *et al.* in their study showed that women with a history of domestic violence experienced fewer unwanted pregnancies [26]. Contrary to these findings, domestic violence in pregnant women with unwanted pregnancies is more than four times more likely than in pregnant women with wanted pregnancies [27, 28]. It seems that the findings are more influenced by the type of perspective on the relationship between these two variables. That is, whether we see domestic violence by women following an unwanted pregnancy or vice versa. Perhaps the reason for the unexpected results of this study is that there is domestic violence in women with wanted pregnancies, based on culture.

This means that women often do not interact well with their husbands and are subjected to domestic violence, though their spouses' morals will improve as they have children. So, for this reason, they want to have a child, which in Iranian culture it has been introduced as a factor to improve marital relations. On the other hand, unwanted pregnancies in women with violence and inappropriate interactions may be less than in other women. This is because some of these women use safer methods of contraception due to life dissatisfaction and fear of having children in families without strong foundations [25]. Also, it seems that violent women are less inclined to continue their unwanted pregnancies and are more likely to have abortions. The higher incidence of spontaneous abortion can also be considered one of the consequences of pregnancy in women who are victims of violence [29].

One of the limitations of this study is limited access to the samples due to the absence of pregnant women's spouses, who were referred to the clinics. In order to control this limitation, the questionnaires were distributed to individuals through their spouses or virtual networks. This study included all pregnant women, regardless of gestational age or specific

gestational conditions, that did not require hospitalization. Therefore, it is suggested to study the violence of pregnant women against their husbands, taking into account variables such as gestational age or high-risk pregnancy.

Conclusion

There is a significant relationship between the most individual, social, and economic determinants with the violence of pregnant women against their husbands. Since violence against men has been less studied than violence against women, providing comprehensive health services to men as women is necessary. In particular, screening of abused men or men at risk of domestic violence and then referring them to appropriate authorities should be done to prevent or treat the consequences of violence, and supportive systems for these men should be developed.

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Ethical permissions: Ethical considerations observed in this study included receiving the ethics code from the Iran University of Medical Sciences (ethics code: IR.IUMS.REC.1397.338), obtaining informed consent from the participants, and assuring them to observe the confidentiality of personal information of the participants.

Conflict of interest: This article is retrieved from a master thesis entitled "investigating the factors related to domestic violence in the husbands of pregnant women referring to health centers of Iran University of Medical Sciences" in 2018-2019 with the code of 97-2-3-12456.

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References

- 1- Monadi M. The effect of the same concepts and definition of couple in marital satisfaction from the perspective of women. *Soc Psychol Stud Women*. 2004;2(4):5-40. [Persian]
- 2- Abbaszadeh M, Ahyayi P, Koohi K. Husband abuse: Case study of married men in Tabriz metropolis. *Soc Woman*. 2016;6(4):19-40. [Persian]
- 3- Perryman SM, Appleton J. Male victims of domestic abuse: Implications for health visiting practice. *J Res Nurs*. 2016;21(5-6):386-414.
- 4- Firouzjaeian A, Rezaeicharati Z. The sociological analysis of females' violence against men. *Q J Soc Dev*. 2014;9(2):105-30. [Persian]
- 5- Ghazizadeh H, Zahrakar K, Kiamanesh A, Mohsenzadeh F. Conceptual model of underlying factors in women domestic violence against men. *Iran J Psychiatr Nurs*. 2018;6(4):35-48. [Persian]
- 6- Deshpande S. Sociocultural and legal aspects of violence against men. *J Psychosex Health*. 2019;1(3-4):246-9.

- 7- Malik JS, Nadda A. A cross-sectional study of gender-based violence against men in the rural area of Haryana, India. *Indian J Community Med*. 2019;44(1):35-8.
- 8- Black MC, Basile KC, Breiding MJ, Smith SG, Walters MI, Merrick MT, et al. The national intimate partner and sexual violence survey (NISVS): 2010 summary report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2011.
- 9- Malveiro A. Domestic violence against man: Where are we around the world [Internet]. Unknown Publisher City: SSRN; 2018 [Unknown cited]. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3278117.
- 10- Safariolyae N, Amiri M. Impact of intimate partner violence against men. *Int J Law Educ Soc Sports Stud*. 2017;4(1):43-7.
- 11- Shayan A, Masoumi SZ, Kaviani M. The relationship between wife abuse and mental health in women experiencing domestic violence referred to the forensic medical center of Shiraz. *J Educ Community Health*. 2015;1(4):51-7. [Persian]
- 12- Machado A, Denise H, Marlene M. Characteristics of intimate partner violence victimization experienced by a sample of Portuguese men. *Violence Vict*. 2018;33(1):157-75.
- 13- Moeini B, Ezzati Rastegar K, Hamidi Y, Hosseini M, Soltanian A. Social determinants of intimate partner violence among Iranian pregnant women. *KOOMESH*. 2018;20(2):350-7. [Persian]
- 14- Tittlova M, Papacek P. Factors contributing to domestic violence. *Int J Entrep Knowl*. 2018;6(2):117-24.
- 15- Fisher J, Mello MCD, Patel V, Rahman A, Tran T, Holton S, et al. Prevalence and determinants of common Perinatal mental disorders in women in low-and lower-middle-income countries: A systematic review. *Bull World Health Organ*. 2012;90(2):139-49.
- 16- Nazari H, Farhadi A, Jariayani M, Hosseinabadi R, Asgari S, Majidimehr M. Mental health of pregnant women referred to Khorramabad health centers. *YAFTEH*. 2014;16(2):40-8. [Persian]
- 17- Hashemian M, Solhi M, Gharmaroudi G, Mehri A, Joveini H, Shahrabadi R. Married men's experiences of domestic violence on their wives: A qualitative study. *J Qual Res Health Sci*. 2018;7(2):185-97.
- 18- Gholamzadeh S, Zarenezhad M, Rezaeian M, Iravani A, Ghorbanzadeh M, Sahraian A. Epidemiology of husband abuse in Fars province among people referred to forensic medicine administrations of Shiraz from 2012 to 2014: A short report. *J Rafsanjan Univ Med Sci*. 2018;17(8):781-8. [Persian]
- 19- 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 Gynecol Obstet*. 2011;112(1):15-7.
- 20- 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(3):283-316.
- 21- Amini L, Heydari M, Danesh Parvar H, Gharaee B, Mehran A. The relationship between dimensions of domestic violence and social structural determinants of health in women. *J Mazandaran Univ Med Sci*. 2014;24(114):131-4. [Persian]
- 22- Fulu E, Jewkes R, Roselly T, Garcia-Moreno C. Prevalence of and factors associated with male Perpetration of intimate partner violence: Findings from

the UN multi-country cross-sectional study on men and violence in Asia and the Pacific. *Lancet Glob Health*. 2013;1(4):187-207.

23- Crane CA, Pilver CE, Weinberger A. Cigarette smoking among intimate partner violence perpetrators and victims: Findings from the national epidemiologic survey on alcohol and related conditions. *Am J Addict*. 2014;23(5):493-501.

24- Lee M, Stefani KM, Park EC. Gender-specific differences in risk for intimate partner violence in South Korea. *BMC Public Health*. 2014;14:415.

25- Machisa MT, Christofides N, Jewkes R. Social support factors associated with psychological resilience among women survivors of intimate partner violence in Gauteng, South Africa. *Glob Health Action*. 2018;11 Suppl 3.

26- Kamal SMM. Domestic violence, unwanted pregnancy and pregnancy termination among urban women of Bangladesh. *J Family Reprod Health*. 2013;7(1):11-22.

27- Martin De Las Heras S, Velasco C, De Dios Luna J, Martin A. Unintended pregnancy and intimate partner violence around pregnancy in a population-based study. *Women Birth*. 2015;28(2):101-5.

28- Mogharab F, Poornowrooz N, Mosallanezhad Z, Javadpour S, Jamali S. Unintended pregnancy causing nascent violence against women: A case study from Iran. *Ambient Sci*. 2018;5 Suppl 1:1-6.

29- Stephenson R, Jadhav A, Winter A, Hindin M. Domestic violence and abortion among rural women in four Indian states. *Violence Against Women*. 2016;22(13):1642-58.