

## Risk Factors of Physical Domestic Violence against Women during Breastfeeding in Tehran, Iran: A Cross-Sectional Study

Zahra Bazazbanisi<sup>1,2</sup>, \*Sedigheh Amir Ali Akbari<sup>3</sup>, Mohammad Ali Emamhadi<sup>4</sup>, Alireza Akbarzadeh Baghban<sup>5</sup>

<sup>1</sup>MSc, Department of Midwifery, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran. <sup>2</sup>Department of Midwifery, College of Medicine, Qom Branch, Islamic Azad University, Qom, Iran. <sup>3</sup>PhD, Midwifery and Reproductive Health Research Center, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran. <sup>4</sup>Department of Forensic Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran. <sup>5</sup>Department of Basic Sciences, School of Rehabilitation Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

### Abstract

#### Background

Due to the prevalence of domestic violence and its effect on women's health, especially during breastfeeding, this study was conducted to investigate the factors associated with physical domestic violence during breastfeeding in Iranian women.

#### Materials and Methods

This descriptive cross-sectional study was performed through multi-stage sampling on 549 women who had infants up to 6 months of age during breastfeeding, and referred to health centers affiliated to Shahid Beheshti University of Medical Sciences in Tehran, Iran. For data collection demographic, obstetrics, breastfeeding status and WHO physical domestic violence questionnaires were used. Data analysis was performed with SPSS software version 19.0.

#### Results

The results showed that the rate of physical violence was 35.7%, and 5.8% of women experienced physical violence more than 5 times during breastfeeding. In logistic regression, husband's occupation ( $p < 0.014$ ), women's education ( $p < 0.007$ ), household income ( $p < 0.003$ ), independent income of women ( $p < 0.002$ ), infant gender ( $p < 0.002$ ), husband's support in breastfeeding ( $p < 0.035$ ), exclusive breastfeeding ( $p < 0.001$ ) were associated with physical domestic violence during breastfeeding.

#### Conclusion

Some socioeconomic characteristics such as education, occupation of women and their husband, age of husband, duration of the marriage, infant gender, household income, and the independent income of women were related to physical violence during breastfeeding. It is necessary to identify women exposed to violence to prevent its complications, especially during breastfeeding.

**Key Words:** Breastfeeding, Domestic violence, Infancy, Reproductive period.

\*Please cite this article as: Bazazbanisi Z, Amir Ali Akbari S, Emamhadi MA, Akbarzadeh Baghban A. Risk Factors of Physical Domestic Violence against Women during Breastfeeding in Tehran, Iran: A Cross-Sectional Study. *Int J Pediatr* 2020; 8(12): 12553-563. DOI: [10.22038/IJP.2020.51010.4051](https://doi.org/10.22038/IJP.2020.51010.4051)

#### \*Corresponding Author:

Dr. Sedigheh Amir Ali Akbari, Midwifery and Reproductive Health Research Center, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Email: [sedaliakbari@gmail.com](mailto:sedaliakbari@gmail.com)

Received date: Mar.12, 2020; Accepted date: Apr 22, 2020

## 1- INTRODUCTION

Violence is a major threat to the health of people in society, especially vulnerable groups such as women and children. Violence against women is one of the most important health issues due to its impact on their reproductive health and physical and mental health, and almost one-third of women in the world have experienced violence at least once (1). According to the World Health Organization, 80% of victims of domestic violence are women (2). In different parts of the world, between 15% and 71% of women have experienced domestic violence (3). In developed countries, about 28% of women say they have been physically abused by their husbands at least once during their marital life. This figure varies from 18% to 67% in developing countries (4). In Iran, studies are reported from 10.7% to 78.1% in different cities (5). Domestic violence is a continuous and hidden epidemic and can occur at any stage of women's life and affect their health. Women of childbearing age appear to be more prone to domestic violence (3).

The occupation and low household income, husband's addiction, insufficient support of woman by her family, smoking by woman, young age of woman, low educational level of husband, lack of emotional interest of a wife in the husband, history of childhood violence, number of children, low self-esteem, lack of attention of women to domestic affairs, sexual problems, moral problems, socio-cultural differences, lack of religious beliefs, and not having a son are some of the factors related to domestic violence (6, 7). Domestic violence is associated with adverse effects on women's mental health, including depression, stress, anxiety, and suicidal and self-harming behaviors, as well as being associated with adverse health effects, chronic illness, and drug use (8-10). Studies have also shown that violence can affect women's breastfeeding

because women's breastfeeding is influenced by their physical and mental condition (11). Breastfeeding is one of the most important periods in the life of any baby because breast milk is the best food for infants and meets the basic needs of the baby. In addition to reducing infant mortality, it protects him/her from many childhood diseases (12, 13). Breastfeeding is a behavior that requires the mother's support and her confidence, and during this period, the mother must be psychologically prepared for breastfeeding. Therefore, breastfeeding is a stressful period, so that exposure to stress and anxiety can cause maternal depression and disorders in breastfeeding that affect both the mother's mental health and the baby's cognitive and social development (14, 15). Researchers have concluded that breastfeeding is a multifactorial psychological, physiological, and socio-cultural experience that occurs between two people. For this reason, breastfeeding can affect the physical and mental health of a woman and her child and the mother's motivation to breastfeed (15). Studies have shown that women who have experienced domestic violence are more likely to formula feed their infants. There is also a relationship between maternal boredom and early termination of breastfeeding so that women with lower levels of anxiety have higher self-confidence and as a result, breastfeeding ending is higher in these people (16, 17). Women who have been exposed to partner violence may have a reduced ability to care for the baby and the mother's ability to accept herself as the baby's only food source may be suppressed (16). Women's decisions about infant nutrition are influenced by several factors, including socioeconomic status, maternal age, and level of education, awareness, and knowledge of mother about the importance of breastfeeding, social support, poor mother self-efficacy, and partner violence. Several studies have shown that spouse support in breastfeeding significantly

affects a woman's decision to breastfeed. According to studies, the emotional support of the spouse has a positive effect on the duration of breastfeeding and the mother's decision, and they believe that the father's support of breastfeeding is essential (18, 19). Lack of awareness and sufficient information about the extent and factors related to domestic violence is a major obstacle to awareness of the issue and effective intervention strategies. This study aimed to investigate the extent and factors associated with physical domestic violence during breastfeeding.

## 2- MATERIALS AND METHODS

### 2-1. Study Design and Subjects

This descriptive cross-sectional study was performed on 549 women who were breastfeeding, had infants up to 6 months of age, and referred to health centers affiliated to Shahid Beheshti University of Medical Sciences in Tehran. After the approval of the plan and approval in the ethics committee of Shahid Beheshti University of Medical Sciences, multistage sampling was done. Nine health centers were randomly selected and based on the population covered by each center, a quota was allocated to each center. Mothers entered the study that were Iranian and literate, were currently living with their husbands, and had infants up to 6 months old. They also had no medical restrictions on breastfeeding their infants. The following formula was used to determine the sample size. Taking into account the 10% drop in samples, the minimum required sample of 440 people was estimated and finally, study was conducted on 549 women.

$$n = \frac{\left(z_{1-\frac{\alpha}{2}}\right)^2 p(1-p)}{d^2}$$

$$p=0.5 \quad \alpha=0.05 \quad z=1.96 \quad d=0.05$$

The objectives of the study were explained to the samples and written consent was obtained. Adequate explanations were given regarding the confidentiality of the information and the completion of questionnaires.

### 2-2. Data Collection

A questionnaire made by the researchers was used to collect demographic information, history of obstetrics, socio-economic status, breastfeeding status and unhealthy behaviors of the husband. The socio-economic status questionnaire was used to examine the income, job, and education of mothers and their husbands. The meaning of unhealthy behaviors in this study was smoking, drug addiction, and alcohol consumption of the husband. Physical domestic violence in this study was defined as the violence perpetrated by the husband to the woman during breastfeeding, which was measured by the Domestic Violence Questionnaire taken from the scale of the World Health Organization (20).

In this study, a woman was considered as violated if she gave at least one positive answer to each of the questions related to the physical domestic violence questionnaire. To check the validity of demographic characteristics and obstetric history and socio-economic level, breastfeeding status, unhealthy questionnaires, the content validity method was used. We used the opinions of 10 faculty members of Shahid Beheshti School of Nursing and Midwifery. To evaluate the reliability of these tools, Cronbach's alpha test was performed for internal consistency and retest was used on 30 people similar to the study samples. They completed the questionnaires twice and at intervals of 10 days. Then, the correlation coefficient between the two intervals of questionnaire completion was determined as 0.85 and 0.88, respectively. In the WHO physical domestic violence

questionnaire, the number of cases of violence based on the five-point Likert scale is calculated as never/ once/ twice / 3-5 times/ and more than 5 times and the violated woman is considered to have at least one positive answer to the questions of the domestic violence questionnaire. This questionnaire has validity and reliability and has been used in various studies in Iran (8, 17, 21). Cronbach's alpha coefficient of domestic violence was obtained as 0.92 for the reliability of this questionnaire (21). Cronbach's alpha in this study was 0.88.

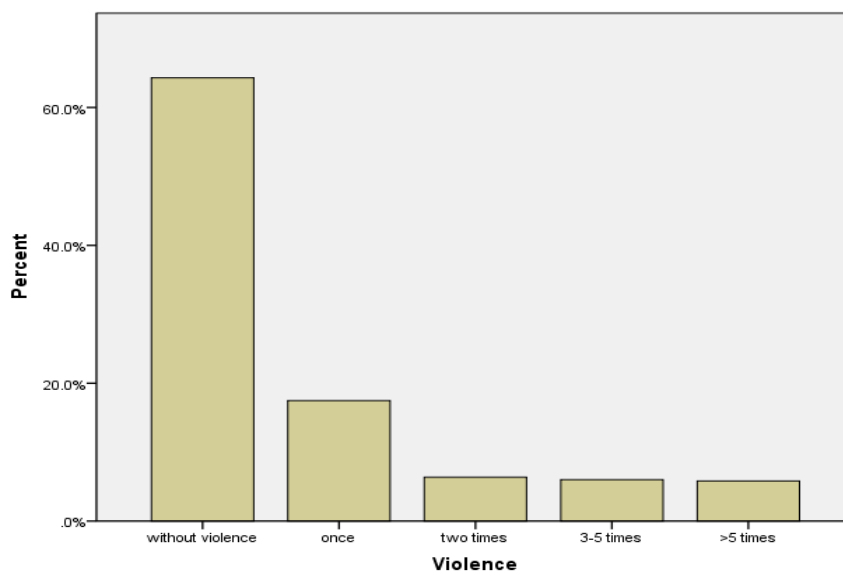
### 2-3. Data Analysis

Data analysis was performed with SPSS 19 software. Kolmogorov-Smirnov test was used to evaluate the normality of the data. To describe the information obtained from descriptive statistics and analyze data, inferential statistics, including independent t-test (quantitative variables), Chi-square

test (nominal variables), Mann-Whitney test were used ( non-parametric, ordinal variables). In addition, logistic regression was used to evaluate the simultaneous effect of factors related to physical domestic violence. A significance level of 0.05 was considered.

### 3-RESULTS

The results showed that the rate of physical domestic violence was 35.7% (n=196) during breastfeeding. 5.8% (n=32) of women had been physically abused more than five times (**Figure. 1**). The results showed that the women were not different in terms of age in the two groups of violent and non-violent. There was a relationship between violence and age of husband, duration of the marriage, infant gender, support of husband during breastfeeding, and husband smoking ( $P < 0.05$ ) (**Table. 1**).



**Fig.1:** Frequency distribution of the number of times of physical violence during breastfeeding.

**Table-1:** Distribution of variables in women with violence and without violence during breastfeeding.

Variables		With violence n=196	Without violence n=353	Results
Age of women (Mean ± SD/year)		29.87±6.32	29.67±5.16	P=0.06*
Age of husband (Mean ± SD/year)		32.46±6.62	33.58±5.59	P=0.036*
Duration of marriage( Mean ±SD/year)		4.51±3.39	7.61±3.28	P=0.007*
Gender of infant Frequency(percentage)	Girl	100(51)	173(48.9)	P=0.002**
	Boy	96(49)	181(51.1)	
Husband support in breastfeeding Frequency(percentage)	Yes	26(12.9)	286(81.1)	P=0.002**
	Relatively	47(23.7)	24(6.7)	
	No	123(63.4)	43(12.2)	
Husband smoking Frequency(percentage)	Yes	166(84.7)	80(22.6)	P=0.013**
	No	30(15.3)	273(73.4)	
Addicted husband Frequency(percentage)	Yes	9(4.6)	3(0.8)	P=0.62**
	No	187(95.4)	350(99.2)	
Type of delivery	NVD	79(40.3)	117(33.14)	P=0.093**
	C/S	117(59.7)	236(66.84)	

\*Independent t-test, \*\*Chi-square test, SD: Standard deviation.

The results showed that there is a relationship between socio-economic variables such as independent income of women, household income, women's and their husbands' occupation and education (**Table.2**). There was a significant

difference in terms of the onset and exclusive breastfeeding between women experiencing and not experiencing domestic violence (**Tables 3, 4**). The factors related to physical domestic violence were examined in logistic regression; the result is shown in **Table. 5**.

**Table-2:** Socio-economic variables in women with violence and without violence during breastfeeding.

Variables		With violence n=196	Without violence n=353	Results
		Frequency (%)	Frequency (%)	
Independent income of the women	Yes	18(9.2)	304(86.1)	P=0.014*
	No	178(90.8)	49(13.9)	
Family income per month (Million=10,000×Rials) (Iran Currency: Rials)	15000>	9(4.6)	14(4)	P=0.024**
	150000-30000	160(81.6)	257(72.7)	
	>30000	27(13.8)	82(23.3)	
Level of women's education Frequency(percentage)	Primary	42(21.42)	74(21)	P=0.022**
	High school and Diploma	124(63.27)	137(38.79)	
	College	30(15.31)	142(40.21)	
Level of husband's	Primary	59(30.11)	71(20.11)	

education Frequency(percentage)	High school And Diploma	106(54.08)	63(17.85)	P=0.032**
	College	31(15.81)	219(62.04)	
Women's employment	Unemployed (Housewife)	177(90.31)	31(8.78)	P=0.03*
	Employed	19(9.69)	322(91.22)	
Husband's employment	Jobless	6(3.06)	5(1.41)	P=0.027*
	Manual worker	28(14.29)	17(4.82)	
	Employee	45(22.96)	195(55.24)	
	Self-employment	117(59.69)	136(38.53)	

\*Chi-square test, \*\*Mann-Whitney test.

**Table-3:** Frequency distribution of mothers experiencing and not experiencing domestic violence in terms of the first time of breastfeeding after delivery.

First time of breastfeeding after delivery	With violence	Without violence	P<0.001*
	Frequency (%)		
1 hour	27(13.5)	62(17.4)	P<0.001*
1 - 3 hours	157(80.7)	266(77)	
4-6 hours	11(5.2)	15 (4)	
More than 6 hours	1(0.5)	10(2.5)	

\*Mann-Whitney test

**Table-4:** Frequency distribution of breastfeeding mothers in terms of current infant nutrition.

Current infant nutrition	With violence	Without violence	P<0.004*
	Frequency (%)		
Exclusive breast-feeding	75(37.9)	201(57.3)	P<0.004*
Breast-feeding+ Formula	105(53.6)	22(6.1)	
Breast-feeding+ complementary feeding	8(4.1)	108(30.5)	
Formula feeding	8(4.1)	22(6.1)	

\*Chi-square test.

**Table-5:** Results of logistic regression analysis to investigate the effect of related factors on physical domestic violence in women during breastfeeding.

Predictor Variables		$\beta$	Standard Error	OR	P value
Husband's age	34year>	0.843	0.234	0.583	0.24
	34year<	Reference			
Duration of marriage	8year>	0.635	0.212	0.729	0.78
	8year<	Reference			
Women's education	Non-Academic	1.55	0.142	6.21	0.007
	Academic	Reference			
Husband's education	Non-Academic	0.437	0.112	0.745	0.051
	Academic	Reference			



Mother's employment	Housewife	0.832	0.609	0.945	0.51
	Employed	Reference			
Husband's employment	Jobless	1.75	0.52	7.023	0.014
	Employed	Reference			
Independent income of the women	No	1.96	0.162	7.87	0.002
	Yes	Reference			
Household income (Rials×10000=Million))	20000>	1.63	0.91	6.54	0.003
	20000<	Reference			
Gender of infant	Girl	2.645	0.31	10.58	0.002
	Boy	Reference			
Husband's support in breastfeeding	Yes	-1.24	0.4	-4.97	0.035
	No	Reference			
Husband cigarette smoking	Yes	0.388	0.891	0.835	0.66
	No	Reference			
First breastfeeding time after delivery	<1hours	0.462	0.76	0.683	0.24
	>After 1 hours	Reference			
Exclusive breastfeeding (During 6 months)	Exclusive breastfeeding	-2.666	0.528	-14.379	0.001
	Non exclusive	Reference			

#### 4- DISCUSSION

The results showed that the rate of physical violence was 35.7%, and 5.8% of women experienced physical violence more than 5 times during breastfeeding. In logistic regression, mother's education, husband's occupation, household income, independent income of mothers, infant gender, husband's support in breastfeeding, exclusive breastfeeding were associated with physical domestic violence during breastfeeding. Zurikbrun et al. (2015) in India reported violence during breastfeeding as 34% (11), Caleyachetty et al. (2019) reported it as 33.3% (12), and James (2014) reported it as 6.3% (22). Physical violence during breastfeeding was reported as 12.9% by Dolatian et al. (2009), in Marivan city, Iran (17). The difference in the reported frequencies can be due to the method of examining violence and the sample size. On the other hand, women's perception of violence varies in different cultures, which can affect their reporting. In a study conducted in Iran, 23% of women mentioned that their spouses had the right

to use violence against them (23). Other studies have shown found that women with lower levels of education were more likely to be exposed to violence (24, 25). Some studies showed that violence was less prevalent when both spouses completed high school (6, 26, 27). This may be because women with lower levels of education are less aware of how to deal with violence. The low level of violence in families with well-educated women can be due to familiarity and the ability to use coping strategies. These people are better acquainted with the rights and status of women in the family than illiterate or semi-literate people (28). The results of our research showed that there is a relationship between husband's occupation and the occurrence of violence. Other studies reported the highest rate of violence in women whose spouses were from lower occupations (29, 30). The research of Hajian et al. (2014), also reported a significant relationship between physical violence and the occupation of spouses, which is consistent with our results (21). Low levels of literacy, low

income, and hard work, and physical and mental fatigue seem to play a role in the incidence of violence in low-income men. In the Badaghabadi et al.'s study (2007), 43% of women were injured and their husbands were self-employed. Job insecurity in men can be one of the factors associated with domestic violence (30). In our study, it was found that there is a relationship between the level of household income and the incidence of violence. With the increase in the level of household income, a decrease is observed in violence against breastfeeding mothers. Most studies showed a significant inverse relationship between domestic violence against women and household income or a higher prevalence of spousal violence in lower-income families, they reported high monthly income as a protective factor against violence (24, 31), however, in other studies, there was no report of the significant relationship between monthly income and violence (29, 30).

Abramsky et al. (2011), also showed an inverse relationship between these two variables (6). Perhaps due to the low income and the inability of the spouse to meet the needs of the family and the psychological burden, this issue manifests in the form of violence against the spouse. The results of this study showed that there is a relationship between mothers' independent income and the incidence of violence. According to the World Health Organization in 2013, women with income are less likely to be abused than women without income (2). In Badaghabadi et al. (2007), 94.6% of injured women had no independent source of income and with increasing women's income level, less violence was observed against them (30). The present study showed that there is a relationship between violence and the gender of the baby as a daughter. The study in South Africa showed that there was a significant relationship between baby gender and domestic violence, and

that violence was lower among those who had a son (32). Zarei et al. (2017) stated that having a son is one of the important cultural and social factors that lead to violence (25). Other studies also mentioned the lack of an infant son as a regular factor in the occurrence of violence (15, 31). This seems to be related to the culture and beliefs of the communities that having a son is an advantage for the family. The results of our research showed that there is a relationship between spouse support in breastfeeding and the occurrence of violence. Those who experienced less violence were more supported by their spouse. Mothers who enjoy the support of their husbands during breastfeeding have higher self-efficacy scores and more successful breastfeeding. When a woman perceives verbal encouragement and active participation in breastfeeding from her husband, she feels more empowered and confident (33, 34).

Spouse support is one of the effective factors in women's success in breastfeeding and this type of support occurs less in a violent relationship. According to present study, there is a significant difference in terms of the onset of breastfeeding between physically abused and non-physically abused mothers, Mitch and Yant (2013), found a significant relationship between physical violence and delay in the onset of breastfeeding (35). The study by Silverman et al. (2006) on American women concluded that while other factors may have a better predictive effect on women's decision-making about breastfeeding, women who have been exposed to violence are more likely not to start breastfeeding or to stop breastfeeding early (36). The results of the present study showed that non-violent women were more likely to be exclusively breastfed than violent women were. Other research showed that women who were less exposed to violence started breastfeeding



earlier and had more exclusive feeding in the first six months (12, 17). In the study by Sørbo et al. (2015), the highest risk factor for the cessation of breastfeeding before 4 months of age was violence (37). However, James et al. (2014) found no difference in this respect between the two groups (22). Kjerulff Madsen et al. (2019), also reported cessation of breastfeeding in less than 6 months (16). Lau, and Chan (2007), reported that women who did not experience violence started breastfeeding earlier (38). Violence can affect women's breastfeeding because women's breastfeeding is influenced by their physical and mental well-being (11). Breastfeeding is a behavior that requires the mother's support and her confidence during this period, and she must be psychologically prepared for breastfeeding (35). Studies have shown that women who have experienced physical and emotional violence are more likely to feed their infants with the foods other than breast milk, and there is a link between maternal boredom and early termination of breastfeeding so that women with lower anxiety levels are more self-confident. As a result, breastfeeding is more common in these people (17, 33). Researchers have concluded that breastfeeding is a multifactorial psychological, physiological, and socio-cultural experience that occurs between two people. Therefore, breastfeeding can affect the physical and mental health of a woman and her child and the motivation of breastfeeding (22).

## 5- CONCLUSION

Some socioeconomic characteristics such as education, occupation of women and their husband, age of husband, duration of the marriage, infant gender, household income, and the independent income of women are related to physical violence during breastfeeding. Given that breastfeeding is an important period in the life of mother and infant, and violence in

this period may have an irreversible effect on the mother, child, and ultimately the family, the need for screening women is very important in this regard.

## 6- ACKNOWLEDGMENT

The ethics committee of Shahid Beheshti University of Medical Sciences (IR.SBMU.PHARMACY.REC.1399.127), approved this research. We would like to thank all the staff of the health centers affiliated to Shahid Beheshti University of Medical Sciences and the mothers who assisted the researcher in this research.

**7- CONFLICT OF INTEREST:** None.

## 8- REFERENCES

1. Cuningham GF, Leveno KJ, Bloom SL, Hauth JC, Rouse D, Spong C. Williams Obstetrics. 23rd ed. New York, N.Y: McGraw-Hill Education LLC; 2010; Chapter 8, p: 210.
2. World Health Organization. Global and regional estimates of violence against women: prevalence and health effect of intimate partner violence and non-partner sexual violence. Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine: South African Medical Research Council. 2013: 2-33. Available at: <https://www.who.int/reproductivehealth/publications/violence/9789241564625>.
3. Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C; WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. *Lancet*. 2008; 371(9619):1165-1172.
4. Amoakohene MI. Violence against women in Ghana: a look at women's perceptions and review of policy and social responses. *Soc Sci Med*. 2004;59(11):2373-2385.
5. Yousefnia N, Nekuei N, Farajzadegan Z. The relationship between healthcare providers' performance regarding women experiencing

domestic violence and their demographic characteristics and attitude towards their management. *J Inj Violence Res.* 2018; 10(2):113-118.

6. Abramsky T, Watts CH, Garcia-Moreno C, Devries K, Kiss L, Ellsberg M, Jansen HA, Heise L. What factors are associated with recent intimate partner violence? Findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health.* 2011;11:109.

7. Naved RT, Persson LA. Factors associated with physical spousal abuse of women during pregnancy in Bangladesh. *Int Fam Plan Perspect.* 2008; 34(2):71-8.

8. Vameghi R, Amir Ali Akbari S, Alavi Majd H, Sajedi F, Sajjadi H. The comparison of socioeconomic status, perceived social support and mental status in women of reproductive age experiencing and not experiencing domestic violence in Iran. *J Inj Violence Res.* 2018; 10(1):35-44.

9. Coker AL, Davis KE, Arias I, Desai S, Sanderson M, Brandt HM, et al. Physical and mental health effects of intimate partner violence for men and women. *Am J Prev Med.* 2002; 23(4):260-268.

10. Pico-Alfonso MA, Garcia-Linares MI, Celda-Navarro N, Blasco-Ros C, Echeburúa E, Martinez M. The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. *J Womens Health (Larchmt).* 2006; 15(5):599-611.

11. Zureick-Brown S, Lavilla K, Yount KM. Intimate partner violence and infant feeding practices in India: a cross-sectional study. *Matern Child Nutr.* 2015; 11(4):792-802.

12. Caleyachetty R, Uthman OA, Bekele HN, Marais D, Coles J, Steele B, & et al. Maternal exposure to intimate partner violence and breastfeeding practices in 51 low-income and middle-income countries: A population-based cross-sectional study. *PLoS Med.* 2019; 16(10):e1002921.

13. Mezzavilla RS, Ferreira MF, Curioni CC, Lindsay AC, Hasselmann MH. Intimate partner violence and breastfeeding practices: a

systematic review of observational studies. *J Pediatr (Rio J).* 2018; 94(3):226-37.

14. Jonas W, Woodside B. Physiological mechanisms, behavioral and psychological factors influencing the transfer of milk from mothers to their young. *Horm Behav.* 2016; 77:167-81.

15. Islam MJ, Baird K, Mazerolle P, Broidy L. Exploring the influence of psychosocial factors on exclusive breastfeeding in Bangladesh. *Arch Womens Ment Health.* 2017; 20(1):173-88.

16. Kjerulff Madsen F, Holm-Larsen CE, Wu C, Rogathi J, Manongi R, Mushi D, Meyrowitsch DW, Gammeltoft T, Sigalla GN, Rasch V. Intimate partner violence and subsequent premature termination of exclusive breastfeeding: A cohort study. *PLoS One.* 2019; 10;14(6):e0217479.

17. Dolatian M, Hesamy K, Shams K, Alavi Majd H. Investigate the relationship between domestic violence and the impact of breastfeeding. *Journal of Nursing and Midwifery, Shahid Beheshti* 2009; 18(61):20-7 (In Persian).

18. Salarkia N, Amini M, Abdollahi M, Eshrati B. Socio-Economic and Cultural Factors Affecting Child Feeding Practices: an Exploratory Qualitative Study in Damavand. *Iranian Journal of Nutrition Sciences & Food Technology.* 2011; 5 (4):75-86 (In Persian).

19. Barona-Vilar C, Escribá-Agüir V, Ferrero-Gandía R. A qualitative approach to social support and breast-feeding decisions. *Midwifery.* 2009; 25(2):187-94.

20. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH; WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet.* 2006; 368(9543):1260-69.

21. 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 Feb 27; 6(3):117-30.

22. James JP, Taft A, Amir LH, Agius P. Does intimate partner violence impact on women's initiation and duration of breastfeeding? *Breastfeed Rev.* 2014; 22(2):11-19.
23. Pournaghash-Tehrani S. Domestic violence in Iran: a literature review. *Aggression and Violent Behavior.* 2011; 16(1):1-5.
24. Thompson RS, Bonomi AE, Anderson M, Reidet RJ, Dimer JA, Carrell D ,& etal. Intimate partner violence: prevalence, types, and chronicity in adult women. *Am J Prev Med.* 2006; 30(6):447-57.
25. Zarei M, Rasolabadi M, Gharibi F, Seidi J. The prevalence of violence against women and some related factors in Sanandaj city (Iran) in 2015. *Electron Physician.* 2017; 25; 9(11):5746-53.
26. Babu BV, Kar SK. Domestic violence against women in eastern India: a population-based study on prevalence and related issues. *BMC Public Health.* 2009; 9:129.
27. Owusu Adjah ES, Agbemafle I. Determinants of domestic violence against women in Ghana. *BMC Public Health.* 2016; 16: 368
28. Kargar Jahromi M, Jamali S, Rahmanian Koshkaki A, Javadpour S. Prevalence and Risk Factors of Domestic Violence Against Women by Their Husbands in Iran. *Glob J Health Sci.* 2015; 28;8(5):175-83.
29. Ghazanfari F. Correlation of family relationship patterns and domestic violence against women in Lorestan province, western part of Iran. *Journal of Fundamentals of Mental Health.* 2010; 12(46):485-488. (In Persian).
30. Bodaghabadi M. Prevalence of violence and its related factors in pregnant women referring to Sabzevar mobini. *Hormozgan Medical Journal.* 2007; 11(1):71-6.
31. Sinha A, Mallik S, Sanyal D, Dasgupta S, Pal D, Mukherjee A. Domestic violence among ever married women of reproductive age group in a slum area of Kolkata. *Indian J Public Health* 2012; 56: 31-6.
32. 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(9):1603-17.
33. Cooke M, Schmied V, Sheehan A. An exploration of the relationship between postnatal distress and maternal role attainment, breast-feeding problems and breast feeding cessation in Australia. *Midwifery.* 2007; 23(1):66-76.
34. Mannion CA, Hobbs AJ, McDonald SW, Tough SC. Maternal perceptions of partner support during breastfeeding. *Int Breastfeed J.* 2013; 8(1):4.
35. Misch ES, Yount KM. Intimate partner violence and breastfeeding in Africa. *Matern Child Health J.* 2014; 18(3):688-97.
36. Silverman JG, Decker MR, Reed E, Raj A. Intimate partner violence around the time of pregnancy: association with breastfeeding behavior. *J Womens Health (Larchmt).* 2006; 15(8):934-40.
37. Sørbø MF, Lukasse M, Brantsæter AL, Grimstad H. Past and recent abuse is associated with early cessation of breast feeding: results from a large prospective cohort in Norway. *BMJ Open.* 2015; 5(12):e009240.
38. Lau Y, Chan KS. Influence of intimate partner violence during pregnancy and early postpartum depressive symptoms on breastfeeding among chinese women in Hong Kong. *J Midwifery Womens Health.* 2007; 52(2):e15-e20.