Determinants of Domestic Violence during Pregnancy

Saeedeh Sadeghi [a], MoradAli Zareipour [b], Nahid Ardian [a], Marziyeh Mirshamsi [a], Mohammad Saeed Jadgal [c*]

[a] Social Determinants of Health Research Center, Non-communicable Diseases Research Institute, Department of Health Education and Promotion, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[b] Department of Public Health, School of Health, Khoy University of Medical Sciences, Khoy, Iran
[c] Department of public health, Chabahar University of Medical Sciences , Chabahar, Iran

A R T I C L E   I N F O

A B S T R A C T

Background: Due to the importance of the issue and the fact that up-to-date studies in this topic have not been conducted in Yazd city, the present research was conducted to investigate and determine the intensity and frequency of domestic violence among pregnant women.

Methods: This was a cross-sectional and descriptive study and sampling was done by simple random method. pregnant women referred to health centers in Yazd in 2021 participated in the study. For the study, 246 pregnant women were selected from 3 health centers in Yazd city in 2021. The tool used for the study was the standard questionnaire known as the Revised Conflict Tactics Scales (CTS2). This questionnaire was utilized to assess domestic violence, measures of dispute resolution, and demographic characteristics. After inputting the data into the SPSS version 26, Mann-Whitney and Kruskal-Wallis non-parametric statistical tests were used for data analysis.

Results: The results showed that the average age of women was 31.47 ± 7.68 with a minimum age of 17 and a maximum of 55. The severity and frequency of the types of violence were measured, and the types of violence in the extreme state related to physical, mental, sexual, and verbal violence and resulting in physical injury were found to be 10%, 25%, 7%, 10%, and 19% respectively. Violence against pregnant mothers showed a significant relationship with the economic status of the family, the age of the mother's marriage, the education level of the parents, and the duration of their marriage ($p<0.001$). One of the most important variables affecting the severity and frequency of violence against pregnant women was the economic status of the family ($p<0.001$).

Conclusion: The findings of this study show a connection between education level, economic status, and the prevalence of domestic violence. It is suggested to prioritize the development of diverse communication and problem-solving skills, as well as education related to family behavior on a wider scope.

Keywords: Domestic violence, women, Intimate Partner Violence, Sex Offenses, Verbal violence, Injury.

Introduction

The family is the central core of every society, responsible for maintaining physical and mental health. It plays a pivotal role in shaping the personality of children(Susilo, 2020). One of the family phenomena that has garnered attention from researchers, sociologists, and psychologists is domestic violence or violence against women within the family. Domestic violence is defined as violent behavior or intentional control exerted by a person closely related to the victim(Bhona et al., 2020). Controlling behavior may include physical abuse, sexual assault, emotional abuse, financial control, and social isolation of the victim. These incidents can occur in any society, irrespective of racial, social, economic, and religious background (Aizpurua et al., 2021).

Due to various reasons, such as reduced sexual activity, misconceptions about pregnancy, and emotional distress related to pregnancy, domestic violence is prevalent during pregnancy, with studies reporting a prevalence of 4-8%. In America in 2013(Hayes et al.), between 152,000 and 324,000 pregnant women reported experiencing physical, mental, or sexual violence, with 13.8% reporting physical violence, 8% reporting sexual abuse, and 28.4% reporting psychological injuries(Hayes et al.). Additionally, a study of Chinese pregnant women by Koling et al. in 2009 revealed that 11.9% of women experienced physical violence, 9.1% experienced sexual violence, and 18.8% experienced other forms of violence during pregnancy. These statistics relevant to forms of violence during pregnancy are even higher in poor countries. (Chan et al., 2009).

A study in India has shown that 26.9% of pregnant women have experienced physical abuse, 29% have experienced mental and emotional abuse, and 2.6% have experienced sexual abuse. Results indicate 47% of the injuries were caused by their husbands, and 31% were inflicted by other family members. Additionally, 4.5% of these women required hospitalization, and 3.8% required serious medical care(Sarkar, 2013).

Violence against pregnant women is also a significant social issue in Iran. A study in Arak in 2009 found that the overall prevalence of violence during pregnancy was 34.5%(Shamsi & Bayati, 2012). In 2013, a study in Mashhad reported that the total rate of violence during pregnancy was 64.1%, with sexual violence being the most common type at 51.6% (Khadivzadeh & Erfanian, 2011).

Various studies have indicated that several factors are significant predisposing factors for domestic violence against pregnant women. These include the mother's age, the husband's age, the family's socio-economic status, education level, high-risk sexual behaviors, alcohol consumption, history of abuse before pregnancy, social support, and the mental and physical health of the couple(Aeri & Farhoud, 2024; Akhtari Zavare et al., 2022; Habibi et al., 2023).

During pregnancy, violence can impact both the mother and the fetus through direct and indirect mechanisms. This can lead to adverse consequences, such as an increased risk of premature and low birth weight babies, abortion, stillbirth, premature separation of the placenta, and bleeding. Additionally, it may result in the baby having a low Apgar score at birth, inadequate weight gain during pregnancy, elevated blood pressure, and an increased risk of depression during and after delivery (Krishnamoorthy & Ganesh, 2022; Medrano et al., 2022).

Even though domestic violence during pregnancy constitutes a wide spectrum of physical and social problems for mothers and their children, many pregnant women are not recognized as victims of violence. In many cases, pregnant women who experience violence may try to conceal the issue to protect their families. Some even tolerate violence, considering it normal and accepted(Sadrzadeh et al., 2020).

Women's physical and mental health is important and their health guarantees the health of their children and spouses. Violence against women, especially during pregnancy, can cause irreparable damage to the fetus. In addition, due to various social, cultural, and social issues, in many cases, violence in all its forms against women remains hidden from society. In addition, no study has been conducted in this

regard in Yazd city, so this study aims to determine the severity and frequency of types of domestic violence carried out in pregnant women in Yazd city.

Methods

The current study was a cross-sectional study that was conducted among pregnant women who were subjected to domestic violence in the clinics of Yazd city in 2020. Also, sampling in this study was done by simple random method. The inclusion criteria were Iranian pregnant women with mental health (without medical history) and the exclusion criteria included addiction and lack of consent to continue cooperation.

Different studies on the rate of violence against pregnant women were different, starting from at least 25%(Moeini et al., 2021; Raziani et al., 2024). The present study used the lowest prevalence rate of 25% to determine the sample size.

Based on previous studies and using a formula to estimate the ratio in society, the sample size needed was calculated to be 246 people, with an accuracy of 5%, an α error of 5%, and a domestic violence ratio of 20%. To obtain this sample, 82 pregnant women meeting the inclusion criteria were randomly selected from each of the 3 health centers in Yazd City for a total of 246 women.

$$n = \frac{Z_{1-\alpha/2} \cdot P(1-P)}{d^2}$$

The demographic information of the mother and her husband was obtained through the interview form, the characteristics of the baby were obtained through the hospital records, and the domestic violence tool called the Conflict Tactics Scales was completed by the mothers after measuring the validity and reliability.

The appropriate validity of a questionnaire depends on the type of study and the field of research, but in general, the existence of content validity and construct validity along with a high reliability of 0.7 can indicate the good quality of the questionnaire. The questionnaire of this study had high reliability and validity with Cronbach's alpha of 0.91. which was a sign of good adequacy of the questionnaire.

After presenting a letter of introduction from the university to the relevant healthcare centers for sampling, the researcher explained the topic and importance to the eligible pregnant mothers at the healthcare centers. After obtaining informed consent and explaining the project's objectives, the researcher assured the mothers that the questionnaires would be anonymous and their information would be kept confidential.

The inclusion criteria included pregnant women referred to health care centers, having Iranian nationality, physical health, mental and emotional health (no medical history), having at least basic literacy, and willingness to complete the questionnaire. Exclusion criteria included addiction and smoking by the mother, and the history of the spouse suffering from mental disorders.

In order to examine domestic violence, the Revised Conflict Tactics Scales(Kishor, 2005; Vega & O'Leary, 2007) questionnaire was utilized in various studies. This questionnaire is a standard tool for assessing the severity and frequency of domestic violence(Vega & O'Leary, 2007). CTS2 is widely used to screen for domestic violence. It includes 5 sub-scales: negotiation, psychological aggression, physical assault, sexual coercion, and injury. The tool consists of 39 questions divided into 5 sections: psychological (8 questions), physical (12 questions), speech (6 questions), sexual (7 questions), and violence leading to physical injury (6 questions). Each question has 5 options. To determine the level of violence in different aspects, the scores from each part are added up to obtain a raw number for data analysis. Based on the total score, the subjects are categorized into five groups: very mild, mild, moderate, severe, and very severe. This helps in determining the frequency of each aspect within each group. The same process is used to calculate the overall level of violence, considering all dimensions, to obtain a general violence index.

The CTS-2 has been reported to have satisfactory reliability and validity (Hadiloo et al., 2024; Soltani Ramezan Zadeh et al., 2020). The validity of this test was checked and confirmed through content validity and with the opinion of several psychiatrists. The

reliability of the tool was measured by Cronbach's alpha method. The result was 0.92(Behnam et al., 2008). This information was used to calculate the index of general violence among individuals. SPSS 26 was used for data analysis. After ensuring the correctness of data entry, the analysis was done. In order to compare the groups in terms of ranked qualitative variables, the Kruskal-Wallis test was used and for nominal qualitative variables, Chi-squared test was used. To compare two groups in terms of quantitative variables with a normal distribution, an independent t-test is used, and in cases of non-normal distribution, the Mann-Whitney test is used.

Results

Out of the 246 pregnant women who took part in the study, the average age was 31.47 ± 7.68, with the youngest participant being 17 years old and the oldest 55(Table 1).

Table 1. Demographic characteristics of pregnant women participating in the study, showing frequency and percentage

Variables	N (%)
Mother's educational level	
Primary school	10(4.1)
Secondary school	45 (18.3)
High school/college	74 (30.1)
University	117 (47.5)
Father's education level	
Primary school	9 (3.9)
Secondary school	27 (10.9)
High school/college	100 (40.7)
University	110 (44.8)
Employment status	
Housewife	193 (78.5)
Occupied	53(21.5)
Husband's occupation	
Employee	56 (22.8)
Worker	71 (28.9)
Self-employed	113 (45.9)
Retired	6 (2.4)
Marriage duration(year)	
<= 5	80 (32.5)
6-10	76 (30.9)
>10	90 (36.6)
Mother's age at marriage (years)	
<=10	32 (13)
11-15	25 (10.1)
> 15	189 (76.9)
Number of children	
<=3 children	242 (98.4)
>3 children	4 (1.6)
consanguineous marriage	
Yes	77 (31.3)
No	169 (68.7)
Income	
> 50000000 IRR[a]	199 (80.9)
< 50000000 IRR	47 (19.1)
Unintended pregnancy	
No	202 (82.1)
Yes	44 (17.9)

[a] IRR: Iranian Rial (Iranian currency), According to the Central Bank of Iran, the average purchasing power parity (PPP) of 1 US dollar was equivalent to 433 072 R during the data collection period.21

The frequency of types of violence according to their intensity is shown in Table 2. These results show the highest frequency in the mildest situation related to sexual violence with 55.2%. Also, the lowest frequency in the mildest condition was related to negotiation violence with 3.7%. The results for the other types of violence and their severity are summarized in (Table 2).

Table 2. Determining the severity and frequency of violence against pregnant women					
Type of violence Subscales	Psychological aggression N (%)	Physical abuse N (%)	Sexual coercion N (%)	Injury N (%)	Negotiation N (%)
Very mild	41(16.7)	116(47.1)	136(55.2)	100(40.7)	100(40.6)
Mild	99(40.2)	109(44.3)	92(37.5)	108(43.9)	110(44.7)
Moderate	73(29.7)	11(4.5)	6(2.5)	18(7.3)	17(6.9)
Severe	25(10.2)	10(4.1)	7(2.8)	18(7.3)	10(4.1)
Very severe	8(3.2)	0	2(5)	2(0.8)	9(3.7)

According to Shapirwilk's normality test, the value (p-value = 0.000) was less than 0.05. The data were not normal and non-parametric tests were used.

The Kruskal-Wallis non-parametric test was used to investigate the relationship between demographic characteristics of pregnant mothers and types of domestic violence. The findings of this study with an alpha of 0.05 showed that there was a statistically significant relationship between education, age, and economic status of pregnant mothers with acts of violence against them. It showed that the higher the education, age, and economic status of pregnant mothers, the less violence against them. Furthermore, the mean and standard deviation of each type of violence had been reported. Due to the large volume of data categories, the results were summarized in a table (Table 3).

Table 3. Determining the relationship between demographic characteristics of pregnant mothers and types of domestic violence				
	Variables	Median	Std.Deviation	P-value
Mother's education	Psychological aggression	17	12.06	0.0001[**]
	Physical abuse	9	7.37	0.001[*]
	Negotiation	8	8.89	0.0001[**]
	Sexual coercion	19	10.14	0.003[*]
	Injury	9	6.68	0.003[*]
Father's education	Psychological aggression	17	12.06	0.043[*]
	Physical abuse	9	7.37	0.102
	Negotiation	8	8.89	0.045
	Sexual coercion	19	10.14	0.421
	Injury	9	6.68	0.008[*]
Marriage duration(year)	Psychological aggression	17	12.06	0.131
	Physical abuse	9	7.37	0.005[*]
	Negotiation	8	8.89	0.018[*]
	Sexual coercion	19	10.14	0.008[*]
	Injury	9	6.68	0.0001[**]
Age at mother's marriage(year)	Psychological aggression	17	12.06	0.059
	physical abuse	9	7.37	0.001[*]
	Negotiation	8	8.89	0.0001[**]
	Sexual coercion	19	10.14	0.002[*]
	Injury	9	6.68	0.002[*]
Family income	Psychological aggression	17	12.06	0.0001[**]
	Physical abuse	9	7.37	0.0001[**]
	Negotiation	8	8.89	0.007[*]
	Sexual coercion	19	10.14	0.0001[**]
	Injury	9	6.68	0.0001[**]

Discussion

Healthcare systems have often failed to identify pregnant women who experience violence. In Iran, there is no clear and specific law to deal with domestic violence, and its prediction has not been scientifically investigated(Gholami & Barzegar, 2018). Results in current study showed the severity and frequency of domestic violence experienced by pregnant women. The results indicated that the highest levels of violence included mental, verbal, physical, sexual, and physical harm, respectively. However, some studies found that verbal violence was the most prevalent form of violence experienced by pregnant women(Orpin et al., 2020). This difference in findings may be due to varied interpretations of psychological and verbal abuse. Women who had experienced violence may categorize hurtful speech as psychological abuse. In some research, these two types of abuse were considered equivalent(Sharbatian et al., 2017).

In studies, psychological violence had been identified as the most common type of violence experienced by pregnant women (D'Angelo et al., 2023; Karaoglu et al., 2006). Acts of psychological violence, which can be measured using different questionnaires, can significantly impact the physical and mental health of women. A study in Egypt revealed that violence had a considerable effect on the mental well-being of pregnant women and could lead to depression during pregnancy (Ghoneim et al., 2021).

The results of the current study indicated that physical violence was the least prevalent among pregnant women, but violence resulting in injury was more frequently reported. Following psychological aggression and negotiation, incidents leading to injury showed the highest percentage. There was a seeming contradiction in which physical violence was reported less frequently than violence leading to injury. This might be explained by the difficulty women may had had in disclosing instances of violence. It was established that the impact of violence during pregnancy could result in mothers giving birth to children with lower birth weights(Fekadu Dadi et

al., 2020; Núñez-Rivas et al., 2003).

The present study focused on pregnant women and found that psychological violence did not significantly differ between pregnant and non-pregnant women. However, further research is needed to fully understand the prevalence of violence against pregnant and non-pregnant women in society(Abdollahi et al., 2014). In terms of factors influencing violence against women, the study revealed that the family's economic status had the greatest impact. A comprehensive study in Turkey also indicated that lower economic status may lead to increased violence against women(Alkan & Tekmanlı, 2021). These findings suggest that the education level of both men and women indirectly affects their economic status and influences the level of violence against pregnant women. Additionally, a study demonstrated a significant relationship between unemployment, low education among spouses, and low economic status with acts of violence against women(Silva & Leite, 2020). Another study confirmed that violence against pregnant women was more common among lower economic strata(Adhena et al., 2020).

In this study, the increased length of marriage was also shown to be effective in reducing the amount of violence. Perhaps it can be explained that with more experience of men and women, as well as taking into account the spirit of children and taking care of them, men and women tend to try to control situations more, especially if the woman is pregnant. These results were also confirmed in several other studies(Aklimunnessa et al., 2007). In a systematic study that was conducted in Iran, several articles investigated the relationship between the age of the pregnant woman, the age of the husband, and the level of domestic violence. An inverse relationship was seen between these two variables. In other words, with the increase in the age of men and women, due to the experience and the reduction of the emotions of the spouses, the amount of violence against women, especially pregnant women who have more special conditions, has been observed to be less(Raziani et al., 2024).

However, not all studies have the same results regarding the number of children and acts of violence against women. The results of the present study did not show a significant relationship between these two variables. The results of Ahmadi's study(Ahmadi et al., 2015), along with the results of the present study, did not show a significant relationship between the number of children and acts of violence against pregnant women. However, some studies show more violence against women with an increase in the number of children(Silva & Leite, 2020). Perhaps it can be said that with the increase in economic problems and the consequences of having more children, the tolerance of men also decreases(Mahmoudiani et al., 2023). In some cases, it has been shown that violence against women had had a negative impact even on the desire to have children.

One limitation of the present study was the restricted demographic of the participants, which only included women visiting clinics. Therefore, caution should be exercised when generalizing the results.

Conclusion

In conclusion, the study revealed that pregnant women experience various forms of domestic violence, with psychological abuse being the most prevalent. Economic difficulties often exacerbate these issues, leading to higher instances of violence. The study also highlighted the correlation between education levels and the prevalence of violence. Additionally, factors such as the age of both men and women, the age of marriage, and the mother's age at marriage were observed to impact the frequency of violence.

Acknowledgment

Conflicts of interest

Funding

Ethical considerations

All ethical considerations have been observed**.**

Code of ethics

IR.SSU.SPH.REC.1399.179

Authors' Contribution

S.S. and M.J. conceived the idea presented in this paper. M.M. and M.Z. developed the theory and performed the calculations. N.A. and M.J. validated the analytical methods. S.S. and M.M. and M.Z. were involved in the investigation of [a specific aspect] and supervised the findings of this study. All authors discussed the results and contributed to the final manuscript.

Open Access Policy

JSBCH does not charge readers and their institutions for access to its papers. The full-text download of all new and archived papers is free of charge.

References

Abdollahi, F., Abhari, F. R., Charati, J. Y., & Rouhani, S. (2014). Impact of psychological violence on pregnancy outcomes in a prospective study. Iranian journal of psychiatry and behavioral sciences, 8(3), 22.[persian]

Adhena, G., Oljira, L., Dessie, Y., & Hidru, H. D. (2020). Magnitude of intimate partner violence and associated factors among pregnant women in Ethiopia. Advances in Public Health, 2020(1), 1682847.

Aeri, R., & Farhoud, F. (2024). Intimate Partner Violence during pregnancy: Impact on women and children: A Review. Journal of Social Behavior and Community Health, 8(1), 1299-1305. [persian]

Ahmadi, M., Rahnavardi, M., Kiyani, M., Purhoseingholi, A., Moafi, F., & Asadzadeh, F. (2015). Study of Predisposing Factors for

Domestic Violence among Women. Journal of health and care, 17(1), 70-81. [persian]

Aizpurua, E., Copp, J., Ricarte, J. J., & Vázquez, D. (2021). Controlling behaviors and intimate partner violence among women in Spain: An examination of individual, partner, and relationship risk factors for physical and psychological abuse. Journal of interpersonal violence, 36(1-2), 231-254.

Akhtari Zavare, M., Ghaleiha, A., & Matinnia, N. (2022). Prevalence and Risk Factors of Domestic Violence in Primigravidae in Low Socio-Economic Areas of Hamedan, Iran. Avicenna Journal of Neuro Psycho Physiology, 9(4), 137-143. [persian]

Aklimunnessa, K., Khan, M. M. H., Kabir, M., & Mori, M. (2007). Prevalence and correlates of domestic violence by husbands against wives in Bangladesh: evidence from a national survey. Journal of Men'S Health and Gender, 4(1), 52-63.

Alkan, Ö., & Tekmanlı, H. H. (2021). Determination of the factors affecting sexual violence against women in Turkey: a population-based analysis. BMC women's health, 21(1), 188.

Behnam, H. R., Moghadam Hoseini, V., & Soltanifar, A. (2008). Domestic violence against the Iranian pregnant women. Internal Medicine Today, 14(2), 70-76. [persian]

Bhona, F. M. d. C., Gebara, C. F. d. P., Noto, A. R., & Lourenço, L. M. (2020). Intimate partner violence: Controlling behavior and triggers of aggression. Paidéia (Ribeirão Preto), 30, e3032.

Chan, K. L., Tiwari, A., Fong, D. Y. T., Leung, W. C., Brownridge, D. A., & Ho, P. C. (2009). Correlates of in-law conflict and intimate partner violence against Chinese pregnant women in Hong Kong. Journal of interpersonal violence, 24(1), 97-110.

D'Angelo, D. V., Bombard, J. M., Lee, R. D., Kortsmit, K., Kapaya, M., & Fasula, A. (2023). Prevalence of experiencing physical, emotional, and sexual violence by a current intimate partner during pregnancy: population-based estimates from the pregnancy risk assessment monitoring system. Journal of family violence, 38(1), 117-126.

Fekadu Dadi, A., Miller, E. R., & Mwanri, L. (2020). Antenatal depression and its association with adverse birth outcomes in low and middle-income countries: a systematic review and meta-analysis. Plos One, 15(1), e0227323.

Gholami, H., & Barzegar, M. (2018). The Prediction of Domestic Violence against Women and Adopted Strategies according to Its BasisCriminal low doctrins, 14(14), 3-38. [persian]

Ghoneim, H. M., Elprince, M., Ali, T. Y. M., Gharieb, W. F., & Ahmed, A. A. (2021). Violence and depression among pregnant women in Egypt. BMC pregnancy and childbirth, 21, 1-7.

Habibi, F., Khani, S., & Ahmadi, M. (2023). Social Determinants of Reproductive Age Women's Sexual Health: A Scoping Review. Journal of Nursing and Midwifery Sciences, 10(4). [persian]

Hadiloo, N., Lalooha, F., Sarichloo, M. E., & Oveisi, S. (2024). Prevalence of Intimate Partner Violence in pregnant women during the COVID-19 epidemic in Qazvin-Iran 2021. Discover Social Science and Health, 4(1), 11.

Hayes, T., Bridges, L., & Sharma, M. (2017). Developing and validating an instrument to measure change in binge drinking to responsible drinking in college students using multi-theory model (MTM) of health behavior change.

Karaoglu, L., Celbis, O., Ercan, C., Ilgar, M., Pehlivan, E., Gunes, G., . . . Egri, M. (2006). Physical, emotional and sexual violence during pregnancy in Malatya, Turkey. The European Journal of Public Health, 16(2), 149-156.

Khadivzadeh, T., & Erfanian, F. (2011). Comparison of domestic violence during pregnancy with the Pre-pregnancy period and its relating factors. The Iranian Journal of Obstetrics, Gynecology and Infertility, 14(4), 47-56. [persian]

Kishor, S. (2005). Violence against women: a statistical overview, challenges and gaps in data collection and methodology and approaches for

overcoming them

Krishnamoorthy, Y., & Ganesh, K. (2022). Prevalence and determinants of physical violence and its impact on birth outcomes during pregnancy in India: evidence from a nationally representative survey. Journal of interpersonal violence, 37(5-6), 2615-2632.

Mahmoudiani, S., Dorahaki, A., & Abedi, M. (2023). The Impact of Domestic Violence against Women on the Ideal Number ofChildren (Results of a Survey in the City of Sadra). Journal of Population Association of Iran, 18(35), 275-304. [persian]

Medrano, L. V. P., Loarte, M. A. G., Visconti-Lopez, F. J., Azañedo, D., & Vargas-Fernández, R. (2022). Physical violence during pregnancy and its implications at birth: analysis of a population survey, 2019. Healthcare, (Vol. 11, No. 1, p. 33).

Moeini, B., Jahanfar, S., Rezapur-Shahkolai, F., Karami, M., Naghdi, A., & Ezzati-Rastegar, K. (2021). Prevalence of intimate partner violence among pregnant women in the poor neighborhoods of Hamadan, Iran. Violence and victims, 36(4), 565-579. [persian]

Núñez-Rivas, H. P., Monge-Rojas, R., Gríos-Dávila, C., Elizondo-Ureña, A. M., & Rojas-Chavarría, A. (2003). Physical, psychological, emotional, and sexual violence during pregnancy as a reproductive-risk predictor of low birthweight in Costa Rica. Revista Panamericana de Salud Publica= Pan American Journal of Public Health, 14(2), 75-83.

Orpin, J., Papadopoulos, C., & Puthussery, S. (2020). The prevalence of domestic violence among pregnant women in Nigeria: a systematic review. Trauma, Violence, & Abuse, 21(1), 3-15.

Raziani, Y., Hasheminasab, L., Gheshlagh, R. G., Dalvand, P., Baghi, V., & Aslani, M. (2024). The prevalence of intimate partner violence among Iranian pregnant women: a systematic review and meta-analysis. Scandinavian journal of public health, 52(1), 108-118. [persian]

Sadrzadeh, S. M., Mousavi, S. M., Kakhki, B. R., Rahmani, S., Deldar, K., & Hematiali, S. (2020). Factors of Domestic Violence against Pregnant Women Referring to the trauma centers in Mashhad. Iranian Journal of Obstetrics, Gynecology and Infertility, 23(3), 26-32. [persian]

Sarkar, N. N. (2013). The cause and consequence of domestic violence on pregnant women in India. Journal of Obstetrics and Gynaecology, 33(3), 250-253. [persian]

Shamsi, M., & Bayati, A. (2012). Frequency and severity of domestic violence in pregnant women. Journal of Gorgan University of Medical Sciences, 13(4), 67-75. [persian]

Sharbatian, M. H., Danesh, P., & Pooya Tavafi. (2017). Sociological analysis of domestic violence against women and its relationship with the feeling of security at home (a case study of women aged 18-54 in the Miane city. Journal of Strategic researches of social issues, 6(1), 47-72. [persian]

Silva, R. d. P., & Leite, F. M. C. (2020). Intimate partner violence during pregnancy: prevalence and associated factors. Revista de saude publica, 54, 97.

Soltani Ramezan Zadeh, M., Rasoulian, M., Mohammadsadeghi, H., Ahmadzad-asl, M., Nohesara, S., Soraya, S., & Eftekhari, N. (2020). The effect of communication skills training and conflict resolution tactics on marital satisfaction of married women in Kermanshah. Journal of Iranian Medical Council, 3(2), 79-88. [persian]

Susilo, S. (2020). The role of families in cultivating children's personality values: An analysis of social psychology education. Journal of Social Studies Education Research, 11(4), 275-303.

Vega, E. M., & O'Leary, K. D. (2007). Test–retest reliability of the revised Conflict Tactics Scales (CTS2). Journal of family violence, 22, 703-708.