DOI: https://doi.org/10.53350/pjmhs2023171223

SYSTEMIC REVIEW

Prevalence and Risk Factors of Domestic Violence during Pregnancy: A Meta-Analysis Approach

NOORULAIN JAVED[1], SALEEM AHMAD[2], SHUMAILA NARGUS[1], MUHAMMAD AZIZULLAH[1]
[1]*University Institute of Public Health, University of Lahore, Pakistan*
[2]*Department of Community Medicine, University College of Medicine and Dentistry, University of Lahore, Pakistan*
Correspondence to Dr. Shumaila Nargus, E-mail: dr_shumailanargus@yahoo.com, Cell number: 00923311450183

ABSTRACT

Background: Domestic violence is of various types and is associated with various health risks. This also effects fetal health.
Aim: To evaluate the prevalence and risk factors of domestic violence during pregnancy in Pakistan and other international settings.
Methods: Material was taken through several search engines such as Google scholar, Medline and web search. Data is collected mostly from those studies which are carried out after year 2000. It includes observational studies reporting estimates of prevalence and its risk factors among pregnant women of age more than 15 years. For this purpose 6431 papers were screened and 41 papers met inclusion criteria.
Results: Total 115506 participants from all over the world were represented in the data. Meta-analysis produced pooled prevalence estimates of lifetime exposure to any type of domestic violence (DV) of 46.546 % (95% CI 46.258-46.834) by fixed effect and by applying random effect prevalence of domestic violence is 35.349 % (95%CI 28.972-42.000).
Conclusion: Domestic violence is common among females with low education. In this meta-analysis, lowest prevalence of domestic violence in pregnant females is come out in Japan and highest in third world countries like Ethiopia, Africa.
Keywords: Domestic violence, intimate partner violence, prevalence, Pregnancy, Pakistan

INTRODUCTION

Domestic violence is defined as a range of physical, psychological and sexually coercive acts against adult and adolescent women by a former or a current male intimate partner or family members[1]. Domestic violence transpires primarily between intimate partners, on all sides of emotional, psychological, economic, physical and sexual forms of violence, control, abusive threatening behavior and coercion[2].

Domestic violence, despite being a major public health problem, is slightly an unrecognized issue in the world. Domestic violence, due to its adverse health effects, must be considered as a major public health problem world-wide and must be given due importance[3]. Females experiencing domestic violence can face uncountable disadvantages like miscarriage, irruption of placenta, preterm birth, fetal abnormalities and low birth weight[4,5].

This is male dominant society. Male rules over females and force her to accept every kind of violence as duty and should make compromise in any situation. In this modern era, people still think that violence is some kind of private thing between husband and wife. And they think that there is no need to discuss this matter publicly and this is normal thing and women should make compromise with it. There are certain models including sociological, psycho-pathological, gender and family systems theories that tend to explain why violence persists within husband wife relationships. Most Pakistani women think that violence is not a crime[13].

This issue become the top priority for many health organizations, researchers, policy makers and for people of medical disciplines. Domestic violence has been studied for at least 20 years in Europe and North America. Moreover, studies have been done on this topic in Mexico since the late 1990s. One more Pan American Health Organization has assessed that women experiencing domestic violence during their pregnancy lose an average of 1 out of 5 days of healthy life[14].

Regardless of race, religion, age, social status and national boundaries violence occurs during pregnancy. In 2005, WHO studied this topic and observed that around 28% women during their pregnancy are abused. Some women think that may be their partner stop doing violence if they got pregnant. But sad reality is that an opposite effect has been observed in result of pregnancy[15].

Surveys in Egypt, Israel, Palestine and Tunisia suggest that 1 out of 3 women in these countries experiences domestic violence and gets beaten by her husband. This discernment against women is not a new phenomenon and it is not restricted to Pakistan only. South Asian women for the most part from India, Pakistan and Bangladesh usually find themselves in subordinate positions to men. Normally, women from this part of the world are socially, culturally and economically dependent on their partners[18].

Received on 13-08-2022
Accepted on 07-12-2022

Pregnant females who experienced domestic violence are more prone to miscarriage than women who are non-violated[6]. Various studies show that domestic violence may vary between 0.9% and 20.1%. Due to these variations rate of miscarriages has been increased. 9.7% to 29.7% is a prevalence that may vary from man to woman in an intimate relationship. Domestic violence may not occur only in one form. It can take many shapes such as sexual, physical, mental, and psychological. Many women revealed during interview that slapping and punching are common. Some women suffered from burns and permanent injuries due to weapon usage. This kind of violence can take a lot of time to heal and in some cases it can lead to suicide[7].

There are some statistics about prevalence of domestic violence. According to the World Health Organization the lifetime prevalence of domestic violence, including physical or sexual violence ranges between 15% and 71%. The same study shows that past-year prevalence also shows a wide variation from 4% to 54%. The lowest rates of domestic violence are found for Japan and the highest rates are for comparatively under-developed countries like Ethiopia, Peru, and Bangladesh[16].

Various health risks increases during pregnancy due to domestic violence from which can harm both mother and the fetus[8]. In many obstetrics and gynecological setting the main reason behind self-induced and attempted abortions, spontaneous miss-carriages, multiple therapeutic abortions, separation during pregnancy and divorce is domestic violence[9]. Especially in Pakistan and other third world countries there are various key factors that are linked to increased chances of experiencing domestic violence on women by their partners. This includes low level of education, sexual abuse during childhood, the factor that their mother is ever exposed to domestic violence in their lives, acceptance of violence and exposure to other forms of prior abuse[10,11].

Domestic violence during pregnancy has harmful repercussions for both the mother and the child. Maternal deaths are reported as the most severe and highly undesirable outcomes of violence against pregnant women. There is an increased risk of low-birth-weight babies in women who experience domestic violence. Psychiatric illness like anxiety, depression, post-traumatic, stress disorder (PTSD) and suicide can also occur[19].

Domestic violence is accompanied with hostile reproductive health consequences for women including miscarriage, pelvic inflammatory disease, unwanted pregnancy, sexually transmitted disease (STD), maternal mortality, homicide and suicide. 10 to 69% is the prevalence of domestic violence reported by the Worldwide World Health Organization (WHO)[20]. In most of the cases, common sites of injuries were arms, face, head and neck. Moreover, bruises, aches,

pains and local swelling were also reported by many victims. Case of burns are also reported. Psychological impacts had been reported to be connected to all forms of violence[21].

Domestic violence jeopardizes women's autonomy and destroys the social stability. It drains the victim's emotional strength and self-esteem[22]. Moreover, domestic violence against pregnant women is one of the main causes of fetal death by antepartum hemorrhage, placental abruption, rupture of the uterus other fetal fractures and premature labour[23]. Many researches done in Pakistan, Australia, Nicaragua and the United States of America suggest that women experiencing domestic violence and abuse by their partners are at prime risk of committing suicide and suicide attempts. Mostly, female victims of domestic violence by their partners are more likely to suffer from depression, anxiety and phobias as compared to non-abused women[24].

Joint family system is also one of the reason that accelerates the situation of domestic violence. Due to which women especially Pakistani women are predisposed to physical, verbal and emotional abuse by intimate partner and in-laws[26]. It shows the exploitation and established acceptance of the abuse among the victims. In case of gender development and inequality index, Pakistan ranks poorly among other countries. Women in these countries remain a vulnerable part of the population [27]. Other risk factors included are increased usage of drugs, which may lead to irresponsible behavior like domestic violence[28].

In this modern era, domestic violence is still occurring in all over the world especially in remote areas. Violence against women can take various forms such as physical, psychological, social, and sexual. This is affected by many factors such as culture, society, education and much more. This foremost social and public health issue demands significant attention because many of the social, psychological, physical and emotional consequences are associated with this[12].

A comparison of the results obtained from different studies on domestic violence against women in Romania from 2003 to 2007 revealed that domestic violence is increasing with the time[43].

In Durban, South Africa, Mbokata in 2003 estimated the prevalence of domestic violence. For finding the prevalence six hundred and four women were part of this study but only 570 women were confirmed for purpose of interview. The overall prevalence standardized for age and sex was 52 %. 78% of the women during their pregnancy experienced psychological problems while 7% had a pre-term delivery[45].

The government of India has confirmed 33 % cases of domestic violence in three eastern states i.e. Orissa, West Bengal, and Jharkhand of India. Only those women were taken for collection of data who experienced domestic violence. Total sample is of 1718 women, 1525 women were taken for the study. Domestic violence during pregnancy is a seriously emerging problem in developing and developed countries. [50]

According to the survey that was held in Chile between September of 2006 and January 2007.Antenatal care centers were approached by the team that took sample of 256 pregnant woman by using convenient sampling method. In this case partner's violence came to be 53.2 %. Participants in this study were on average 25 years old[52].

In Pakistan, generally men are considered superior to women and they often see women as their property. In developing countries, major causes of domestic violence against female members are illiteracy or low education levels, existing backward patriarchal social structure, inadequate protection by laws and the low social status of women. Those women who face domestic violence in their childhood with their mothers by their father are more prone to domestic violence [29].

The prevalence of physical domestic violence reported in this survey was 31%. The main culprits were Husbands and in-laws. The numbers reported in our studies as aforementioned prevalence of domestic violence 31% are comparable with national figures 35-44% as quoted in several studies. The prevalence of domestic violence in other developed and under-developed nations shows almost parallel condition [37]. In another survey that was held in Rawalpindi and Islamabad, 97% of the women who were interviewed, self-confessed that they had been exposed to some sort of domestic violence[38].

A hospital-based survey was carried out with women in the postnatal wards at Rajshahi, in Bangladesh. Between July 2015 and April 2016, data of 400 pregnant women were collected. According to this study 43 % of the participants of this study experienced any type of physical violence during their lifetime. Moreover, 35.5% of the women experienced sexual domestic violence. 32.5% were facing both sexual and physical violence [67].

In Uttar Pradesh, India, 2199 women were taken into a population based study to determine the prevalence of domestic during pregnancy. The findings from this study reveal that 18% of the interviewed women remained victims of domestic violence in their last pregnancy. There are risks for perinatal and neonatal mortality after pregnancy[68].

The survey suggests that 64.6 % is the prevalence of domestic violence. Physical violence was reported as the most prevalent type of violence (44.1%). Psychological violence stands on the second top occurring form of violence with 39.1%. Many of the respondents were victims of sexual violence 23.7%.[74] Africa has highest rates of reported cases when it comes to domestic violence against women as compared to other countries in the world. We designed to diagnose the prevalence of domestic violence in low resource settings in Cape Town. Study was carried out to explore the related elements pertaining to domestic violence. The prevalence of domestic was 15%. The sample was of 376 women [69].

One more cross-sectional survey was conducted to calculate the incidence of domestic violence among 299 pregnant women Technique used in this study is systematic sampling technique. Questionnaire was employed to measure domestic violence. The survey suggests that 64.6 % is the prevalence of domestic violence. Physical violence was reported as the most prevalent type of violence (44.1%). Psychological violence stands on the second top occurring form of violence with 39.1%. Many of the respondents were victims of sexual violence 23.7%[74].

Ashenafi in 2020 in Eastern Ethiopia conducted a survey on 3015 pregnant females in Eastern Ethiopia. The mode of the survey was community-based cross-sectional study and data was gathered by using a questionnaire. The overall prevalence of domestic violence was 30.5%, psychological prevalence violence was 24.4%, physical violence was come out to be 11.9% and sexual violence was 11.0%. The study suggests that forced sexual intercourse amounts 95% of actions of sexual violence[75].

Domestic violence during pregnancy is a global problem and it can cause various health risks which are major threatening factors for both the baby and mother. In many countries researchers are busy in finding out the key reasons behind this major health issue and also try to assess the new interventions which can minimize or at least control it. But these efforts are still in their early stages, and the majority of results are explicitly from high-income and developed countries. Low or middle income under-developed countries are in dire need to find ways to introduce new interventions to control domestic violence in general and especially during pregnancy.

In Pakistan and all over the world innumerable studies have been conducted using different study designs on the same topic, so the main purpose of this meta-analysis is to assess the domestic violence and related risks factors amongst the female during pregnancy all over the world to determine the gap of high and low prevalence of domestic violence against female during pregnancy using meta-analysis.

Objectives of study were to find the pooled prevalence of domestic violence during pregnancy by using meta-analysis and to explore the existing factors associated with domestic violence during pregnancy

METHODS

We are using the highest level of study design that is meta-analysis. In the present study, an intimate partner refers to the past or present spouse. Studies were searched using PubMed, Web of Science, and Google scholar. Search terms include domestic violence, but not limited to this. It also includes family violence, partner violence, intimate partner violence, spousal violence, gender-based violence, pregnancy, prenatal, antenatal, prevalence, rate, magnitude, epidemiology, observational study and epidemiological investigation. These studies are restricted to English only and researcher herself throughout the process of research assesses these

Inclusion criteria

1) All original epidemiological studies conducted in Pakistani women and international settings.
2) Samples obtained from clinical settings or general population or mixed.

3) Studies with clear survey time and place during pregnancy or one year after delivery at the time of assessment.
4) Studies giving information of sample-size and prevalence estimation of IPV during pregnancy.

Exclusion criteria

1) Studies that have not reported the prevalence of domestic violence during pregnancy adequately & clearly are excluded.
2) Qualitative studies, case-control studies, case reports, reviews and conference presentations and abstract.
3) Articles published in two international journals.
4) Articles originally published in a language other than English will be excluded

RESULTS

Table 1: In this meta-analysis table we came to know that cumulative sample size for domestic violence is 115506 and pooled prevalence of domestic violence is 46.5% using fixed effect and 35.3% using random effect. Maximum proportion of domestic violence is 76%, reported by Rabbani in 2008 and minimum proportion is 2 % in 2010.
Table 2: Test for heterogeneity was done at 95% CI at significance level < 0.0001% and degree of freedom at 40 showed that inconsistency is 99.72 % of included studies.
Table 3: Egger's test of publication bias was done at 95% and significance level at 0.0018 showed intercept of -12.3519. Similarly significance level of Begg's test of publication bias was done at 0.0075 and intercept at 0.2902.
Figure 1: The forest plot of fixed effect is used for finding the heterogeneity and the pooled result. A forest plot selections point calculate the average and confidence interval which is represented by whiskers for multiple studies.
Figure 2: This is the funnel plot of fixed effect for finding the prevalence of domestic violence. It is a simple scatter plot which measures the study size on the vertical axis. Intervention effect can also be find out from individual studies against some measure of each study's size or precision. In common with forest plots, it is most common to plot the effect estimates on the horizontal scale, and thus the measure of study size on the vertical axis.
Figure 3: In random effect, Forest plots demonstrate the ratio and confidence interval from each individual study using the horizontal line plot. The location of the box on the x-axis represents the ratio value for that outcome in that particular study, and the 95% confidence interval extends out as lines from the sides of this box and horizontal.
Figure .4 A funnel plot of the random effect is a scatter plot of the effect estimates from individual studies against some measure of each study's size or precision. The standard error of the effect estimate is often chosen as the measure of study size.

Table 1 :Meta-analysis table

Study	Sample size	Proportion (%)	95% CI	Weight (%)	
				Fixed	Random
(Habib, Abbasi et al. 2018)	1000	35.000	32.042 to 38.047	0.87	2.45
(Ashenafi, Mengistie et al. 2020)	3015	29.983	28.351 to 31.654	2.61	2.46
(Yohannes, Abebe et al. 2019)	299	64.883	59.178 to 70.289	0.26	2.43
(Zareen, Majid et al. 2009)	410	51.951	46.994 to 56.880	0.36	2.44
(Field, Onah et al. 2018)	376	14.894	11.451 to 18.901	0.33	2.43
(Singh, Evans-Lacko et al. 2018)	426	28.873	24.612 to 33.431	0.37	2.44
(Kanwal Aslam, Zaheer et al. 2015)	3687	37.998	36.428 to 39.588	3.19	2.46
(Ali, Israr et al. 2009)	504	33.929	29.801 to 38.246	0.44	2.44
(Rabbani, Qureshi et al. 2008)	102	76.471	67.043 to 84.305	0.089	2.35
(Bibi, Ashfaq et al. 2014)	378	31.746	27.080 to 36.700	0.33	2.43
(Shaikh 2000)	193	24.870	18.943 to 31.587	0.17	2.40
(Almeida, Coutinho et al. 2017)	852	43.427	40.068 to 46.832	0.74	2.45
(Muzrif, Perera et al. 2018)	2088	36.973	34.898 to 39.085	1.81	2.46
(Sarkar 2013)	3129	30.968	29.351 to 32.622	2.71	2.46
(Boyle and Todd 2003)	307	50.163	44.429 to 55.894	0.27	2.43
(Shaikh 2000)	127	33.071	24.981 to 41.971	0.11	2.37
(Rada 2014)	1206	30.929	28.328 to 33.623	1.04	2.46
(Hoque, Hoque et al. 2009)	95	11.579	5.924 to 19.774	0.083	2.34
(Mbokota and Moodley 2003)	570	12.105	9.542 to 15.069	0.49	2.45
(Perales, Cripe et al. 2009)	2392	44.983	42.976 to 47.003	2.07	2.46
(Ahmed, Koenig et al. 2006)	2199	17.963	16.379 to 19.632	1.90	2.46
(Saltzman, Johnson et al. 2003)	64994	59.999	59.622 to 60.376	56.25	2.47
(Babu and Kar 2009)	1525	33.967	31.590 to 36.406	1.32	2.46
(Gurung and Acharya 2016)	350	15.143	11.553 to 19.335	0.30	2.43
(Chaudhary, Chaudhary et al. 2010)	950	2.000	1.208 to 3.106	0.82	2.45
(Both, Favaretto et al. 2020)	256	52.734	46.422 to 58.982	0.22	2.42
(Jahanfar and Malekzadegan 2007)	1800	60.000	57.694 to 62.273	1.56	2.46
(Regmi, Subedi et al. 2017)	470	52.979	48.353 to 57.566	0.41	2.44
(Yimer, Gobena et al. 2014)	425	32.000	27.586 to 36.667	0.37	2.44
(Yost, Bloom et al. 2005)	12612	19.997	19.302 to 20.706	10.92	2.47
(Huria, Deepti et al. 2005)	991	27.952	25.176 to 30.859	0.86	2.45
(Shrestha, Shrestha et al. 2016)	404	26.980	22.711 to 31.591	0.35	2.44
(Castro, Peek-Asa et al. 2003)	914	33.917	30.849 to 37.089	0.79	2.45
(Vung, Ostergren et al. 2008)	883	30.011	27.003 to 33.154	0.77	2.45
(Esmailzadeh, Faramarzi et al. 2005)	2400	15.000	13.594 to 16.492	2.08	2.46
(Ali, Asad et al. 2011)	759	57.049	53.440 to 60.603	0.66	2.45
(Ameh and Abdul 2004)	178	35.955	28.913 to 43.474	0.15	2.40
(Gyuse and Ushie 2009)	340	62.941	57.566 to 68.089	0.30	2.43
(Farid, Saleem et al. 2008)	500	44.000	39.596 to 48.476	0.43	2.44
(Asif, Zafar et al. 2010)	800	41.000	37.568 to 44.499	0.69	2.45
(Xu, Zhu et al. 2005)	600	43.000	38.998 to 47.071	0.52	2.45
Total (fixed effects)	115506	46.546	46.258 to 46.834	100.00	100.00

Total (random effects)	115506	35.349	28.972 to 42.000	100.00	100.00

Table: 2 Test for heterogeneity

Q	15223.4120
DF	40
Significance level	P < 0.0001
I^2 (inconsistency)	99.74%
95% CI for I^2	99.72 to 99.76

Table 3: Publication bias

Egger's test	
Intercept	-12.3519
95% CI	-19.7923 to -4.9115
Significance level	P = 0.0018
Begg's test	
Kendall's Tau	0.2902
Significance level	P = 0.0075

Figure 1: Forest plot of fixed effect

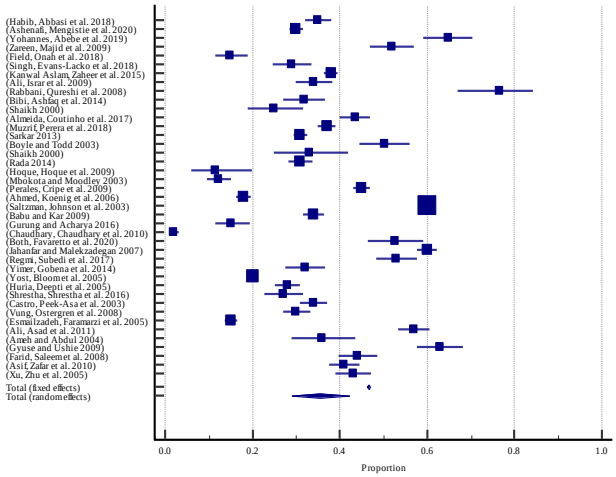


Figure 2: Funnel plot of fixed effect

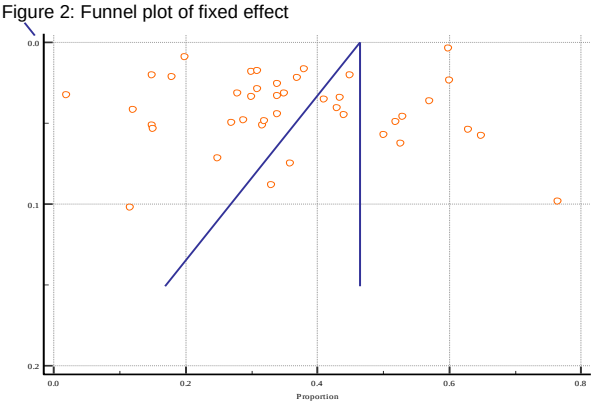


Figure 3: Forest plot of Random effect

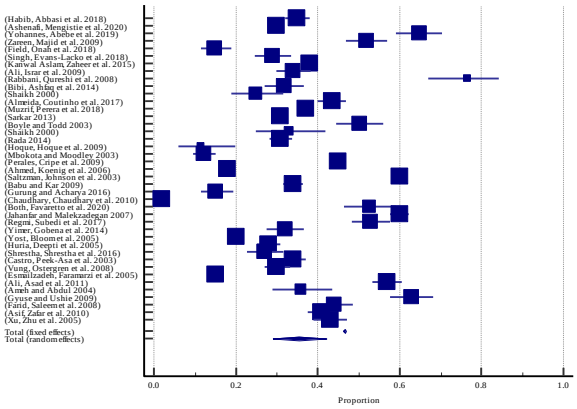
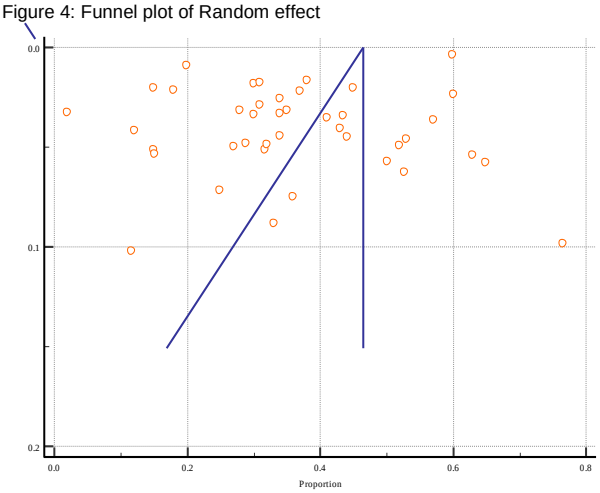


Figure 4: Funnel plot of Random effect



DISCUSSION

Domestic violence has become one of the major public health issue from past couple of decades. It is one of the serious social issue which should not be ignored especially during pregnancy. Domestic violence is any kind of brutal act and include violent or abusive behavior by family member. In most cases male member of the family mistreats the women. Current study evaluate that domestic violence is increasing at alarming rate mostly in third world countries. Government of many countries don't take any step to control or stop the evil situation. There are rare studies that prevalence of domestic violence is accelerating day by day.

This is the first systematic review and meta-analysis of the prevalence of domestic violence during pregnancy at larger scale. Worldwide it is reported that one in every three women has experienced domestic violence in pregnancy during her lifetime. World Health Organization's revealed that frequency of domestic violence ranges from 15 to 17%. In this multi-county study prevalence of domestic violence comes to be lowest for Japan is lowest and the highest for Bangladesh, Peru and Ethiopia. It can be concluded that the rates of prevalence are comparatively higher than community-level estimates from local demographic and health surveys[77].

The result proves that when they collected the data from clinical studies there is a lack of pooled domestic violence prevalence. A US based study reveals that occurrence of domestic violence during pregnancy stands at 35% for lower socio-economic population[78]. In line with the theory suggests that in India the frequency of domestic violence

is very high and also accelerating on a very high rate.ie. 56%. Moreover, the rates of sexual, psychological and physical violence against women were also significantly higher[79]. A meta-analysis were conducted in USA and other financially good countries assessed that one study was carried out in family medicine and 38% and 40% in emergency medicine setting[80].

We found mixed evidence of prevalence of different type of violence. That's why we considered those meta-analysis article which included large number of sample size so we can find accurate prevalence. One study in Pakistan determine the prevalence figures for physical and sexual violence which results are 50% and 44% respectively. These numbers are significantly higher than what WHO estimates for the link between sexual and physical domestic violence.

Strengths of this review include a broad search strategy and inclusion of publications in English language only so everyone can understand easily because it is international language. Only those studies are included which have information about prevalence of domestic violence during pregnancy or one month after delivery. Those articles are not considered which are published in two different journal. In this systematic review case –control studies, reviews, case reports, abstracts are not added. Only original epidemiological studies are added that were conducted in Pakistan and other international settings. Majority of studies gained approval of institutional ethics or at least gave some consideration to ethical issues.

For calculating the prevalence of domestic violence, random females taken for face to face interview, questionnaire are used to know about the details of types of violence and who are the most dominant preparatory of violence on females .Meta-analysis table is used to calculate the prevalence by using random and fixed effect. To find out the prevalence of domestic violence risk of Bias was used to evaluate the risk of bias in individual studies. Egger's test of publication bias was done at 95% and significance level at 0.0018 showed intercept of -12.3519. Similarly significance level of Begg's test of publication bias was done at 0.0075. To know about the heterogeneity, a random-effects model was used to calculate the pooled prevalence and corresponding 95% confidence interval, and then meta-regression analyses were executed to explore the sources of heterogeneity.

In this study we come to know that most of the violence was done by the husbands. So partner is the culprit. In some cases in-laws were also the culprit and can be the main reason of violence on females especially during pregnancy. In this case they gave the silly reasons. One study reveal that mother-in-laws particularly involved in mental abuse and male family members are the reason of physical and mental abuse.

There are many categories of domestic abuse not only one type of abuse and each type has its own devastating effect. Following are the types of abuse. Physical abuse, sexual abuse, isolation, verbal abuse, economic abuse using male privilege, Economic abuse. Most of the females taken for collecting the sample is mostly from second and trimester and some interview is taken from postnatal period.

Like other studies, our study also has several limitations. Our approximations for prevalence of domestic violence during pregnancy outcomes have wide confidence intervals and high I^2 statistics showed relatively small pooled samples and high levels of variance. Most studies covered the limited range of sample of prevalence.

CONCLUSION

Domestic violence during pregnancy is a critical public health problem. In this research, it was found that the prevalence of domestic violence among pregnant women. There are rare studies on this subject, yet many questions are still unanswered. Such as prevalence of this kind of victimization, the risk factors, and the consequences. For identification of the abused victims, prevention of potential trauma and to interrupt existing violence, routine screening during the antenatal visits with structured questionnaires is necessary. In this meta-analysis, lowest prevalence of domestic violence in pregnant females is come out in Japan and highest in third world countries like Ethiopia, Africa.

RECOMMENDATIONS

Domestic violence is an important public health issue on which a lot of work is needed to avoid the evil effects of physical abuse and we should also make an effort to evaluate fetal outcomes. Counselling of couples can play a pivotal role to end or limit this evil act. In this in-laws can also do counselling and play a supportive role. A careful planning is also required through government to start the abuse prevention program and make it compulsory for all health care worker to participate in it so they can educate and spread awareness about it. Though government of Pakistan has considered the issue but there was no follow up in the past on this issue and there is also a need of recognition at the national levels.

Limitations: In Pakistan and all over the world domestic violence is growing at an alarming rate. But still there are only few research studies on this topic moreover there is incomplete access and also not fully documented. In order to measure this issue there is no epidemiological surveillance systems that employ homogenous criteria. There is a lack of consensus regarding the definition of violence against women. There is methodological differences in understanding the problem due to the variability in the figures in different countries.

Disclosure of conflict of interest: The authors declare no conflict of interest.

Statement of ethical approval: Ethical approval was given by the University Institute of Public Health Committee and the Research Ethics group of the University of Lahore.

Author Contributions: All of the authors have the same contribution to the manuscripts.

Funding Source: This research did not receive any specific grant(s) from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgment: I would like to thank my family and teachers for their ongoing support, guidance, and help during the study. Moreover, I would like to extend my sincere gratitude to my colleagues, friends, and relatives for always being by my side.

REFERENCES

1. Heise L, Garcia-Moreno C. Violence by intimate partners. 2002.
2. Garcia-Moreno C, Watts C. Violence against women: an urgent public health priority. Bulletin of the world health organization. 2011;89:2-.
3. Marwick C. Domestic violence recognized as world problem. Jama. 1998;279(19):1510-.
4. Bullock LF, McFarlane J. The birth-weight/battering connection. The American journal of nursing. 1989;89(9):1153-5.
5. Pearlman MD, Tintinalli JE, Lorenz RP. Blunt trauma during pregnancy. New England Journal of Medicine. 1990;323(23):1609-13.
6. Khan A, Hussain R. Violence against women in Pakistan: Perceptions and experiences of domestic violence. Asian Studies Review. 2008 Jun 1;32(2):239-53.
7. Martin SL, Tsui AO, Maitra K, Marinshaw R. Domestic violence in northern India. American journal of epidemiology. 1999 Aug 15;150(4):417-26.
8. Rabbani F, Qureshi F, Rizvi N. Perspectives on domestic violence: case study from Karachi, Pakistan. EMHJ-Eastern Mediterranean Health Journal, 14 (2), 415-426, 2008. 2008.
9. Bullock L, McFarlane J, Bateman LH, Miller V. The prevalence and characteristics of battered women in a primary care setting. The Nurse Practitioner. 1989;14(6):47, 50, 3-6.
10. Johnson J, Haider F, Ellis K, Hay D, Lindow S. The prevalence of domestic violence in pregnant women. BJOG: An International Journal of Obstetrics & Gynaecology. 2003;110(3):272-5.
11. Garcia-Moreno C, Heise L, Jansen HA, Ellsberg M, Watts C. Violence against women. Science. 2005 Nov 25;310(5752):1282-3.
12. McFarlane J, Parker B, Soeken K, Bullock L. Assessing for abuse during pregnancy: severity and frequency of injuries and associated entry into prenatal care. Jama. 1992;267(23):3176-8.
13. Stark E, Flitcraft A. Women at risk: Sage; 1996.
14. Organization WH. Understanding and addressing violence against women: Intimate partner violence. World Health Organization, 2012.
15. Boy A, Salihu HM. Intimate partner violence and birth outcomes: a systematic review. International journal of fertility and women's medicine. 2004;49(4):159-64.
16. Ameh N, Shittu SO, Abdul MA. Obsetric outcome in pregnant women subjected to domestic violence. Nigerian journal of clinical practice. 2009;12(2).
17. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. The lancet. 2002 Oct 5;360(9339):1083-8.
18. Rabbani F, Qureshi F, Rizvi N. Perspectives on domestic violence: case study from Karachi, Pakistan. EMHJ-Eastern Mediterranean Health Journal, 14 (2), 415-426, 2008. 2008.27.
19. Ali Kamali M, Rahimi Kian F, Mir Mohamad Ali M, Mehran A, Shafiei E. Comparison of domestic violence and its related factors in pregnant women in both urban and rural population in Zarand city, 2014. Journal of Clinical Nursing and Midwifery. 2015;4(2).
20. Bacchus L, Mezey G, Bewley S. A qualitative exploration of the nature of domestic violence in pregnancy. Violence against women. 2006 Jun;12(6):588-604.
21. Castro R, Peek-Asa C, Ruiz A. Violence against women in Mexico: a study of abuse before and during pregnancy. American Journal of Public Health. 2003 Jul;93(7):1110-6.
22. Fikree FF, Bhatti LI. Domestic violence and health of Pakistani women. International journal of gynecology & Obstetrics. 1999 May;65(2):195-201.
23. Macy RJ, Martin SL, Kupper LL, Casanueva C, Guo S. Partner violence among women before, during, and after pregnancy: multiple opportunities for intervention. Women's health issues. 2007 Sep 1;17(5):290-9.
24. Roberts GL, Lawrence JM, Williams GM, Raphael B. The impact of domestic violence on women's mental health. Australian and New Zealand journal of public health. 1998 Dec;22(7):796-801.
25. Ali PA, Gavino MIB. Violence against women in Pakistan: a framework for Analysis.

Journal-Pakistan Medical Association. 2008;58(4):198.
26. Cohen RA, Brumm V, Zawacki TM, Paul R, Sweet L, Rosenbaum A. Impulsivity and verbal deficits associated with domestic violence. Journal of the International Neuropsychological Society: JINS. 2003 Jul 1;9(5):760.
27. Chaudhary SK, Chaudhary P. Gender based violence among pregnant women: a hospital based study. Journal of Nepalgunj Medical College. 2017 Jun 1;15(2):44-8.
28. Babua BV, Kar SK. Abuse against women in pregnancy: a population-based study from Eastern India. WHO South-East Asia Journal of Public Health. 2012;1(2):133-43.
29. Crempien RC, Rojas G, Cumsille P, Oda M. Domestic violence during pregnancy and mental health: exploratory study in primary health centers in Peñalolén. International Scholarly Research Notices. 2011;2011.
30. Castro R, Peek-Asa C, Ruiz A. Violence against women in Mexico: a study of abuse before and during pregnancy. American Journal of Public Health. 2003 Jul;93(7):1110-6.
31. Ali TS, Asad N, Mogren I, Krantz G. Intimate partner violence in urban Pakistan: prevalence, frequency, and risk factors. International journal of women's health. 2011;3:105.
32. Babu BV, Kar SK. Domestic violence against women in eastern India: a population-based study on prevalence and related issues. BMC public health. 2009 Dec;9(1):1-5.
33. Hawcroft C, Hughes R, Shaheen A, Usta J, Elkadi H, Dalton T, Ginwalla K, Feder G. Prevalence and health outcomes of domestic violence amongst clinical populations in Arab countries: a systematic review and meta-analysis. BMC public health. 2019 Dec;19(1):1-2.
34. Ahmed, S., et al. (2006). "Effects of domestic violence on perinatal and early-childhood mortality: evidence from north India." American journal of public health 96(8): 1423-1428.
35. Khan NT, Begum A, Chowdhury TM, Das BK, Shahid F, Kabir S, Begum M. Violence against women in Bangladesh. Delta Medical College Journal. 2017 Feb 4;5(1):25-9.
36. Bibi S, Ashfaq S, Shaikh F, Qureshi PM. Prevalenceinstigating factors and help seeking behavior of physical domestic violence among married women of HyderabadSindh. Pakistan journal of medical sciences. 2014 Jan;30(1):122.
37. Yohannes K, Abebe L, Kisi T, Demeke W, Yimer S, Feyiso M, Ayano G. The prevalence and predictors of domestic violence among pregnant women in Southeast Oromia, Ethiopia. Reproductive health. 2019 Dec;16(1):1-0.
38. Ferdos J, Rahman MM. Maternal experience of intimate partner violence and low birth weight of children: a hospital-based study in Bangladesh. Plos one. 2017 Oct 26;12(10):e0187138.
39. Ali TS, Asad N, Mogren I, Krantz G. Intimate partner violence in urban Pakistan: prevalence, frequency, and risk factors. International journal of women's health. 2011;3:105.
40. Field S, Onah M, van Heyningen T, Honikman S. Domestic and intimate partner violence among pregnant women in a low resource setting in South Africa: a facility-based, mixed methods study. BMC women's health. 2018 Dec;18(1):1-3.
41. Yohannes K, Abebe L, Kisi T, Demeke W, Yimer S, Feyiso M, Ayano G. The prevalence and predictors of domestic violence among pregnant women in Southeast Oromia, Ethiopia. Reproductive health. 2019 Dec;16(1):1-0.
42. Ashenafi W, Mengistie B, Egata G, Berhane Y. Prevalence and associated factors of intimate partner violence during pregnancy in Eastern Ethiopia. International journal of women's health. 2020;12:339.
43. Habib S, Abbasi N, Khan B, Danish N, Nazir Q. Domestic violence among pregnant women. Journal of Ayub Medical College Abbottabad. 2018 May 27;30(2):237-40.
44. Yohannes K, Abebe L, Kisi T, Demeke W, Yimer S, Feyiso M, Ayano G. The prevalence and predictors of domestic violence among pregnant women in Southeast Oromia, Ethiopia. Reproductive health. 2019 Dec;16(1):1-0.
45. Zareen N, Majid N, Naqvi S, Saboohi S, Fatima H. Effect of domestic violence on pregnancy outcome. J Coll Physicians Surg Pak. 2009 May 1;19(5):291-6.
46. Field S, Onah M, van Heyningen T, Honikman S. Domestic and intimate partner violence among pregnant women in a low resource setting in South Africa: a facility-based, mixed methods study. BMC women's health. 2018 Dec;18(1):1-3.
47. Singh JK, Evans-Lacko S, Acharya D, Kadel R, Gautam S. Intimate partner violence during pregnancy and use of antenatal care among rural women in southern Terai of Nepal. Women and birth. 2018 Apr 1;31(2):96-102.
48. Kanwal Aslam S, Zaheer S, Shafique K. Is spousal violence being “vertically transmitted” through victims? Findings from the Pakistan demographic and health survey 2012-13. PloS one. 2015 Jun 17;10(6):e0129790.
49. Ali FA, Israr SM, Ali BS, Janjua NZ. Association of various reproductive rights, domestic violence and marital rape with depression among Pakistani women. BMC psychiatry. 2009 Dec;9(1):1-3.
50. Rabbani F, Qureshi F, Rizvi N. Perspectives on domestic violence: case study from Karachi, Pakistan. EMHJ-Eastern Mediterranean Health Journal, 14 (2), 415-426, 2008. 2008.
51. Seema, Bibi, Ashfaq Sanober, Shaikh Farhana, Pir Mohammad Ali. Prevalence, instigating factors and help seeking behavior of physical domestic violence among married women of Hyderabad, Sindh. 2014; 122-125.
52. Masood S. Intimate partner violence: childhood exposure and respective attitudes among Pakistani young adults (Doctoral dissertation, University of Warwick).2014.
53. Almeida FS, Coutinho EC, Duarte JC, Chaves CM, Nelas PA, Amaral OP, Parreira VC. Domestic violence in pregnancy: prevalence and characteristics of the pregnant woman. Journal of clinical nursing. 2017 Aug;26(15-16):2417-25.
54. Muzrif MM, Perera D, Wijewardena K, Schei B, Swahnberg K. Domestic violence: a cross-sectional study among pregnant women in different regions of Sri Lanka. BMJ open. 2018 Feb 1;8(2):e017745
55. Sarkar NN. The cause and consequence of domestic violence on pregnant women in India. Journal of Obstetrics and Gynaecology. 2013 Apr 1;33(3):250-3.
56. Boyle A, Todd C. Incidence and prevalence of domestic violence in a UK emergency department. Emergency Medicine Journal. 2003 Sep 1;20(5):438-42.
57. Shaikh MA. Domestic violence against women-perspective from Pakistan. J Pak Med Assoc. 2000 Sep;50(9):312-4.
58. Hoque ME, Hoque M, Kader SB. Prevalence and experience of domestic violence among rural pregnant women in KwaZulu-Natal, South Africa. Southern African Journal of Epidemiology and Infection. 2009 Jan 1;24(4):34-7.
59. Mbokota M, Moodley J. Domestic abuse-an antenatal survey at King Edward VIII Hospital, Durban. South African Medical Journal. 2003;93(6):455-7.
60. Perales MT, Cripe SM, Lam N, Sanchez SE, Sanchez E, Williams MA. Prevalence, types, and pattern of intimate partner violence among pregnant women in Lima, Peru. Violence against women. 2009 Feb;15(2):224-50.
61. Ahmed S, Koenig MA, Stephenson R. Effects of domestic violence on perinatal and early-childhood mortality: evidence from north India. American journal of public health. 2006 Aug;96(8):1423-8.
62. Saltzman LE, Johnson CH, Gilbert BC, Goodwin MM. Physical abuse around the time of pregnancy: an examination of prevalence and risk factors in 16 states. Maternal and child health journal. 2003 Mar;7(1):31-43.
63. Babu BV, Kar SK. Domestic violence against women in eastern India: a population-based study on prevalence and related issues. BMC public health. 2009 Dec;9(1):1-5.
64. Gurung S, Acharya J. Gender-based violence among pregnant women of Syangja district, Nepal. Osong public health and research perspectives. 2016 Apr 1;7(2):101-7.
65. Chaudhary P, Chaudhary SK, Shrestha M. Prevalence of gender based violence among pregnant women: a hospital based study. Nepal Journal of Obstetrics and Gynaecology. 2010;5(2):17-22.
66. Jahanfar S, Malekzadegan Z. The prevalence of domestic violence among pregnant women who were attended in Iran University of Medical Science Hospitals. Journal of Family Violence. 2007 Nov;22(8):643-8.
67. Regmi MC, Subedi L, Shrestha R, Dixit B, Shrestha N. Prevalence of Domestic Violence Among the Pregnant Women Attending BPKIHS. Nepal Journal of Obstetrics and Gynaecology. 2017;12(1):32-5.
68. Yimer T, Gobena T, Egata G, Mellie H. Magnitude of domestic violence and associated factors among pregnant women in Hulet Eju Enessie District, Northwest Ethiopia. Advances in public health. 2014 Nov 10;2014.
69. Yost NP, Bloom SL, McIntire DD, Leveno KJ. A prospective observational study of domestic violence during pregnancy. Obstetrics & gynecology. 2005 Jul 1;106(1):61-5.
70. Huria KA, Deepti D, Lajya D, Sunder SS. Domestic violence in pregnancy in North Indian women. Indian journal of medical sciences. 2005;59(5):195-9.
71. Shrestha M, Shrestha S, Shrestha B. Domestic violence among antenatal attendees in a Kathmandu hospital and its associated factors: a cross-sectional study. BMC pregnancy and childbirth. 2016 Dec;16(1):1-0.
72. Castro R, Peek-Asa C, Ruiz A. Violence against women in Mexico: a study of abuse before and during pregnancy. American Journal of Public Health. 2003 Jul;93(7):1110-6.
73. Vung ND, Ostergren PO, Krantz G. Intimate partner violence against women in rural Vietnam-different socio-demographic factors are associated with different forms of violence: Need for new intervention guidelines?. BMC Public Health. 2008 Dec;8(1):1-1.
74. Faramarzi M, Esmailzadeh S, Mosavi S. A comparison of abused and non-abused women's definitions of domestic violence and attitudes to acceptance of male dominance. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2005 Oct 1;122(2):225-31.
75. Ali TS, Asad N, Mogren I, Krantz G. Intimate partner violence in urban Pakistan: prevalence, frequency, and risk factors. International journal of women's health. 2011;3:105.
76. Ameh N, Abdul MA. Prevalence of domestic violence amongst pregnant women in Zaria, Nigeria.
77. Gyuse AM, Ushie AP. Pattern of domestic violence among pregnant women in Jos, Nigeria. South African Family Practice. 2009;51(4).
78. Farid M, Saleem S, Karim MS, Hatcher J. Spousal abuse during pregnancy in Karachi, Pakistan. International journal of gynecology & Obstetrics. 2008 May 1;101(2):141-5.
79. Asif F, Zafar MI, Maann AA, Ahmad M. Domestic violence rural-urban current age and age at marriage differential impact on women physical health in Punjab, Pakistan. Pakistan Journal of Agricultural Sciences. 2010 Jan 1;47(2):178-82.
80. Xu X, Zhu F, O'Campo P, Koenig MA, Mock V, Campbell J. Prevalence of and risk factors for intimate partner violence in China. American journal of public health. 2005 Jan;95(1):78-85.