

SPOUSAL PSYCHOLOGICAL ABUSE AGAINST PREGNANT WOMEN IN ANTENATAL CARE COHORT: MAGNITUDE AND ASSOCIATED FACTORS IN NORTHWEST, ETHIOPIA

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ABSTRACT

BACKGROUND: Violence against women is a serious public health problem and human rights abuse. Psychological abuse was the most common form of intimate partner violence that has not been noticed by policymakers. The magnitude ranges up to 90% among different populations. Developing countries including Ethiopia are at high risk of psychological abuse of women by their spouses. To the best of our knowledge, this study is the first of its kind to exclusively quantify the magnitude of psychological spousal abuse along with the associated factors in the country. Thus, this study aimed to assess the magnitude and associated factors of spousal psychological abuse against pregnant women.

METHODS: This study was a facility-based cross-sectional study including 409 pregnant mothers at Debre Markos town from March 17, 2018 – April 28, 2018. The study participants were selected using a systematic random sampling technique. A pretested and validated questionnaire was used. Binary logistic regression was employed. The adjusted odds ratio with a 95% confidence interval was used to declare statistically significant variables based on p value < 0.05 in the multivariable logistic regression model.

RESULTS: This study found that 119 (29.1%) of pregnant women have experienced psychological abuse by their spouses during their pregnancy period. Residence (AOR: 2.87, 95%CI: 1.11-7.39), age of partner (AOR: 2.68, 95%CI: 1.25-5.75), unwanted pregnancy (AOR: 3.55, 95%CI: 1.08-11.66), history of abortion (AOR: 2.79, 95%CI: 1.13-6.89), and mother's age (AOR: 0.24, 95%CI: 0.11-0.50), have emerged as predictors for psychological spousal abuse during pregnancy.

CONCLUSIONS AND RECOMMENDATIONS: The magnitude of psychological abuse against pregnant women by their spouses was high in this study. Socio-demographic and pregnancy-related factors were important predictors of psychological violence. Consequently, it demands tremendous efforts to mitigate the problem by designing effective and appropriate measures.

KEY WORDS: Psychological spousal abuse, pregnant women, Antenatal care, Ethiopia

(The Ethiopian Journal of Reproductive Health; 2020; 12;31-40)

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BACKGROUND

Domestic violence against women by their intimate partner was considered a minor social problem until the end of the 20th century¹. Currently, violence against women has considered a serious human right abuse and the effect is most prominent in developing countries like Ethiopia². Male intimate partners were the most common aggressors of violence against women^{3, 4}. The lifetime risk of sexual violence was estimated to be 30% and Africa accounts for the highest magnitude⁵. Violence against women could be physical, sexual, and psychological while psychological abuse was accounted for the highest-burden³⁻⁸. The magnitude of psychological spousal abuse varies across countries. Evidenced from a systematic review, psychological abuse against women by their spouses ranges up to 91% in the Arab World⁹. Nearly a 3rd (28.1%) of reproductive age women in Brazil had psychological abuse among pregnant women¹⁰, up to 8.6% (CI 7.4-9.8) in Spain¹¹. A multi-country study finds that severe psychological abuse against women could range from 10.5 -50% in Egypt, Chile, and India¹², more than half (54.7%) of reproductive women in Turkey¹³. The prevalence of psychological spousal abuse ranges from 24.8-40% among different communities of Iraq¹⁴. The perpetrator of domestic violence varies from previous husbands to current husbands. In Ethiopia, most of this violence was from their current husband or boyfriend¹⁵. The lifetime prevalence of domestic violence of women by their intimate partner ranges from 20-78% in Ethiopia with mean psychological violence of 51.7%¹⁶. Psychological spousal abuse had different consequences. Most of the women with psychological disorders during pregnancy end up with postnatal depression¹⁰. Marriage related conditions like partner age, duration of the marriage, and marriage by a family decision are significantly associated with intimate partner violence¹³. Another studies in Iraq point out having an alcoholic husband, different cultures, occupation of the wife, and having children are significant determinants of violence against women¹⁴. Psychological spousal abuse is associated with women and husband education, age

of the victim, occupation, economic status, number of children, and husbands' behavior like an alcoholic¹⁷. In general, different socio-economic, socio-demographic and behavioral characteristics like husband and women education, income, occupation, age, religion, place of residence, chat chewing alcohol consumption, decision making power of women and other marriage and pregnancy-related factors are important predictors of domestic violence including psychological violence^{3, 10-14, 16-31}.

The objective of this study is, therefore, to determine the magnitude of psychological spousal abuse and its factors among antenatal booked pregnant mothers.

METHODS

Study design and area

A facility-based cross-sectional study was conducted from March 17, 2018 – April 28, 2018 at Debre Markos town, Northwest Ethiopia. The town is located in East Gojjam Zone, Amhara Regional State of Ethiopia, and is far 299 km Northwest of Addis Ababa, the capital of Ethiopia and, about 265 kilometers from Bahir Dar town, the capital of the Amhara regional state. It consists of 7 kebeles (the smallest administrative units in Ethiopia). The town has an estimated total population of 92,470, according to the population projection of Ethiopia for all regions at woreda level from 2014 – 2017. Among these 46,738 are females. It has one referral hospital, three public health centers, seven private clinics, and 14 health posts, seven in rural and seven in urban areas. All four public health institutions and three private clinics in the town are providing ANC services.

Population

Source population

All pregnant women who came to antenatal care service in the public health institutions of Debre Markos town, North-west Ethiopia.

Study population

All pregnant women who came to antenatal care service in the public health institutions of Debre Markos town, Northwest Ethiopia during the study period.

Sample size determination and sampling procedure

The sample size was obtained by using the formula for a single population proportion.

A sample size of 422 pregnant women was obtained by employing the following assumptions: Proportion of women who have experienced psychological spousal abuse during pregnancy was 50%, level of significance 95%, a margin of error 5%, and non-response rate 10%. The sample size was allocated proportionally to the four health facilities in the town based on the number of pregnant women that visited each health facility (Wuseta health centre=212, Hidassie health centre =332, Debre Markos town health centre=412, Debre Markos referral hospital= 334) during the preceding month before data collection. Then, the study participants were selected through a systematic random sampling technique.

Study variables and measurements

Psychological spousal abuse during pregnancy is a response variable, whereas socio-demographic, husband/partner characteristics, socio-cultural, and family experience of violence and reproductive variables were independent variables included in this study. Spouse was defined as a current spouse, co-habited (live in the same house without formal marriage), current non-marital partners (boyfriends), former partner, or spouse. Psychological violence was considered in this study, if the respondents say “Yes” to one or more acts or threats of acts, such as shouting, controlling, intimidating, humiliating, and threatening the victim.

Data collection tool and procedures

A validated interviewer-administered questionnaire³² was used to collect data. To ensure the quality of data, the questionnaire was first developed in English, then translated into the local language (Amharic), and finally back into English to check its consistency. Data collectors and supervisors were recruited and trained for two days on ways of data collection. Supervisors and principal investigator were closely monitored the day-to-day data collection process. Finally, data were sorted, checked, entered into the computer, and cleaned for analysis.

Data processing and statistical analysis

The questionnaires were coded, entered, and cleaned by EPI-Info 7.0 statistical software and then exported to SPSS version 20.00 for further analysis. Data were

summarized and presented using descriptive statistics. Model fitness was checked with the assumptions of the Hosmer and Lemeshow test. Bi-variable and multivariable logistic regressions were computed to identify the presence and strength of associations. Odds ratios with 95% CI were computed and variables having a p-value less than 0.05 in the multivariable logistic regression models were considered significantly associated with the dependent variable.

RESULTS

Socio-demographic profile of the study participants

A total of 409 pregnant women were involved in this study making a response rate of 96.9 %. The mean age of women was 27. 1 year with a standard deviation of $\pm 5. 6$ years. More than half (52.1%) of the respondents were in the age group of 17 to 26 years. The samples were predominantly urban (71.6%) and Orthodox Christian religion followers. Regarding occupational status, 46.0 % were housewives. About 95.6 % of the respondents were married and 31.3% have no formal education (Table 1).

Table 1: Socio-demographic characteristics of the study participants in Debre Markos town, northwest Ethiopia, March to April 2018 (n = 409)

Characteristics		Frequency	Percentage
Age group (in years)	17-23	118	28.9
	24-26	95	23.2
	27-30	106	25.9
	31-46	90	22.0
Religion	Orthodox	339	82.9
	Muslim	59	14.4
	Protestant	8	2.0
	Catholic	3	0.7
Place of residence	Rural	116	28.4
	Urban	293	71.6
Current marital status	Single	8	2.0
	Married	391	95.6
	Divorced	7	1.7
	Widowed	1	0.2
	Separated	2	0.5
Educational status	No formal education	128	31.3
	Primary education	64	15.6
	Secondary education	103	25.2
	More than secondary	114	27.9
	House wife	188	46.0
Occupational status	House wife	188	46.0
	Farmer	75	18.3
	Student	1	0.2
	Private employee	18	4.4
	Government employee	79	19.3
	Merchant	35	8.6
	Others ^a	13	3.2
Monthly income in ETB	<2500 ETB	212	51.8
	≥2500 ETB	197	48.2
Others ^a _____	daily laborer, unemployed		

Proportion of spousal psychological abuse among pregnant mothers

The result of this study revealed that 119 (29.1 % [95%CI: 24.7, 33.7]) pregnant women were psychologically abused by their spouse during pregnancy. Among the

119 abused mothers, intimidation 85 (20.8%) were the commonest form of psychological/emotional abuse followed by insulting 62(15.2%) (Figure 1).

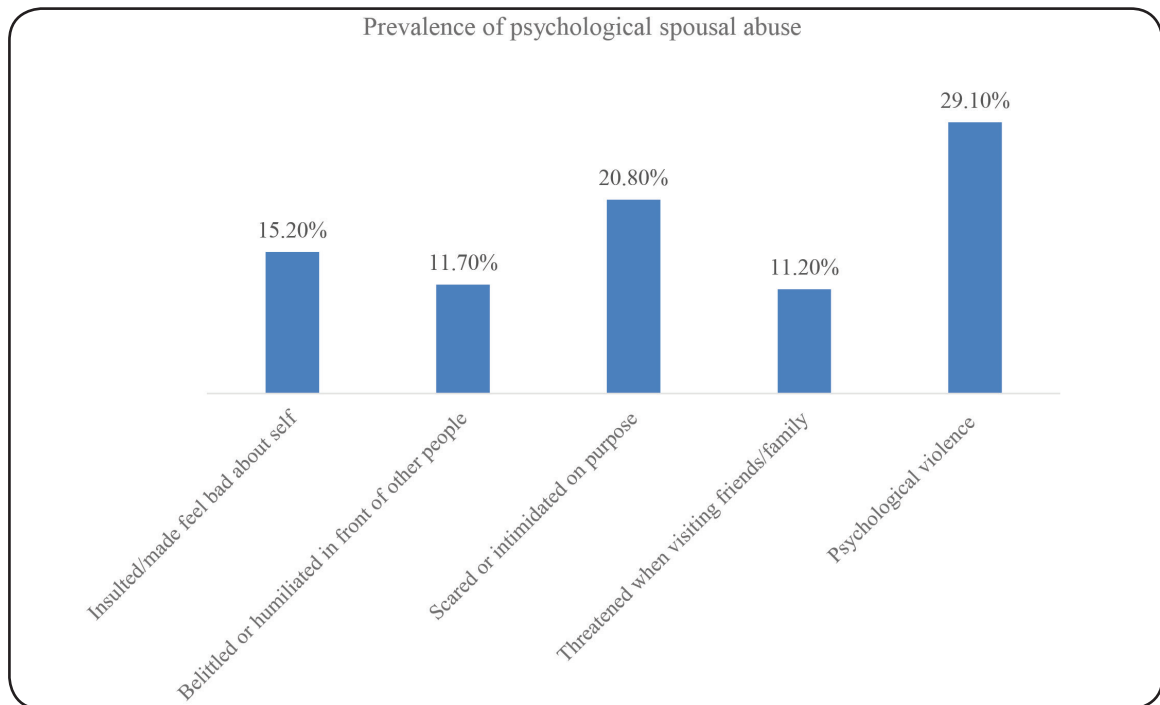


Figure 1: Proportion of psychological spousal abuse among pregnant women in Debre Markos town, North-west, Ethiopia, March to April (n=409)

Factors associated with spousal psychological abuse among pregnant women

Table 2 summarizes the findings of bivariable and multi variable binary logistic regression analysis on the factors associated with psychological spousal abuse among pregnant mothers. In the bi-variable analysis; place of residence, age of mothers, gravidity, parity, age of partner, household monthly income, educational status of the mother, educational status of partner, history of abortion, occupational status of the women, occupation of the partner, had another child, the status of the pregnancy (wanted by women and wanted by partner) were statistically significant with psychological spousal abuse during pregnancy. After controlling the possible confounders, however, the only place of residence, age of partner, mother's age, unwanted pregnancy, and history of abortion were found significantly associated with increased prevalence of psychological spousal abuse during pregnancy.

In this study, rural women were 2.95 times (AOR= 2.95, 95%CI: 1.11-7.86) more likely to have experienced psychological spousal abuse during pregnancy compared to urban women. Age of spouses were also other

sociodemographic variables predicting the likelihood of psychological spousal abuse during pregnancy time. Being in the age group of 17-26 years decreases the odds by 76 % to be victims of psychological abuse compared to those women who are in the age group of 27-46 years (AOR: 0.24, 95%CI: 0.11-0.50). Conversely, partners' who belong to the age interval of 20-31 years had the odds of 2.68 to commit psychological abuse than those who are in the age class of 32-60 years (AOR: 2.68, 95%CI: 1.25-5.75). Besides, we found that unwanted pregnancy was an important factor affecting the appearance of psychological abuse.

The odds of psychological spousal abuse among pregnant women who did not desire the current pregnancy was 3.55 (95%CI: 1.08-11.66) times higher compared to those who desire the pregnancy.

Moreover, the history of abortion as part of reproductive related variables has also affected the occurrence of psychological spousal abuse during pregnancy. Mothers who have no previous history of abortion had the odds of 2.79 to be victims of psychological abuse by their spouse during pregnancy compared with those who have abortion history (AOR: 2.79, 95%CI: 1.13-6.89).

We found no evidence that the association between psychological spousal abuse and marital status, age of partner, age of women, educational status of women, educational status of partner, alcohol consumption by the partner, and other reproductive and socio-cultural related variables.

Table 2: Bivariable and multivariable analysis of factors associated with psychological spousal abuse among pregnant women in Debre Markos town, North-west, Ethiopia, March to April (n=409)

Variables	Spousal sychological Violence		COR (95% CI)	AOR (95% CI)	
	Yes	No			
Women's age	17-26 years	46	167	0.46(0.30-0.72)	0.24(0.11-0.50)**
	27-46 years	73	123	1	1
Age of partner	20-31 years	57	151	0.85(0.55-1.29)	2.68(1.25-5.75)
	32-60 years	62	139	1	1
Monthly income	<2500 ETB	63	134	1.31(0.85-2.01)	0.91(0.53-1.57)
	≥2500ETB	56	156	1	1
Place of residence	Rural	55	61	3.23(2.04-5.01)	2.87(1.11-7.39)*
	Urban	64	229	1	1
Gravidity	Primigravida	47	147	0.64(0.41-0.98)	0.76(0.14-4.13)
	Multigravida	72	143	1	1
Parity	Nulliparous	49	156	0.60(0.39-0.93)	1.21(0.23-6.46)
	Multiparous	70	134	1	1
Educational status of women	Uneducated	51	77	2.08(1.33-3.24)	0.91(0.45-1.86)
	Educated	68	213	1	1
Educational status of partner	Uneducated	50	73	2.15(1.37-3.38)	1.06(0.54-2.07)
	Educated	69	217	1	1
History of abortion	Yes	8	34	1	1
	No	111	256	1.84(0.83-4.11)	2.79(1.13-6.89)*
Occupation of women	House wife	47	141	1	1
	Farmer	39	36	3.25(1.86-5.69)	2.44(0.98-6.06)
	Private and Gov't employe	22	75	0.88(0.49-1.57)	0.88(0.44-1.77)
	Merchant	8	27	0.89(0.38-2.09)	0.87(0.33-2.26)
Occupational of partner	Farmer	48	59	1	1
	Private employee	20	73	0.34(0.18-0.63)	0.79(0.16-3.98)
	Gov't employee	27	95	0.35(0.19-0.62)	1.19(.28-5.06)
Had another child	Yes	19	47	0.49(0.26-0.96)	1.16(0.26-5.26)
	No	22	41	1.38(0.78-2.43)	1.16(0.59-2.27)
The desire for pregnancy by women	Yes	96	253	1	1
	No	23	37	1.64(0.93-2.90)	3.55(1.08-11.66)*
The desire of pregnancy by partner	Yes	98	254	0.66(0.37-1.19)	1.87(0.57-6.15)
	No	21	36	1	1

1=Reference group *p<0.05, **p<0.001, Hosmer and Lemeshow goodness of fit (p=0.46),

DISCUSSION

Intimate partner violence (IPV) is one of the most common forms of violence against women and includes physical, sexual, and emotional/psychological abuse and controlling behavior by an intimate partner. The overwhelming global burden of IPV is endured by women, and the most common perpetrators of violence against women are male intimate partners or ex-partners³³. Psychological spousal abuse is the major predictor of posttraumatic stress disorder in abused women³⁴, but very little is known about it particularly, in Ethiopia. To the best of our knowledge, this study is the first of its kind to exclusively quantify the magnitude of psychological spousal abuse along with the associated factors in the country. As such, we conducted this study to determine the magnitude of psychological spousal abuse among pregnant women and to identify the factors associated with it. Our study found that 29.1 % [95%CI: 24.7, 33.7] pregnant women were psychologically abused by their spouses during pregnancy. This finding supports prior works in psychological spousal abuse which reported 33.0% in southeast Ethiopia,³⁵ 29.0% in Kisumu district, Kenya (36) and lower findings also reported from Hadiya Zone, Southern Ethiopia, 20.0%³⁷, Tigray region, Ethiopia, 23 %³⁸, Western Ethiopia, 16.3%³⁹ and Rwanda, 17%⁴⁰. This variation among reports might be due to differences in background characteristics of the study participants, timing of data collection, study design, availability, and accessibility of information on sexual and reproductive health issues including gender-based issues, cultures of the respondents, geographical areas. The difference in the prevalence of psychological spousal abuse during pregnancy between this study and a study carried out in Rwanda could be due to the difference in the educational level of study subjects. For instance, participants in Rwandan study were mostly of low socioeconomic status, had not completed primary school whereas, in our cases, most had attained primary school and above. Apart from this, there is cultural difference between Rwandan and Ethiopian women. However, the findings of our study on the magnitude of psychological spousal abuse during pregnancy was lower than a study conducted in Sao Luis, Brazil, 41.6%⁴¹. This can be possibly explained by that the study in Brazil includes participants who were at the time of child birth

and post-partum period, which could probably increase the magnitude of psychological intimate partner violence by providing the chance to identify the abuse during the entire course of pregnancy⁴².

Turning to the associated factors, a significant association was observed with women's age. It was showed that being in the age class of 17-26 years decreases the odds by 76 % to be victims of psychological spousal abuse compared to those women who are in the age group of 27-46 years (AOR: 0.24, 95%CI: 0.11-0.50). Similar earlier results were also reported^{43, 44}. This may be owing to the probability that younger women may be more likely to be educated about women's rights thereby lessening the likelihood of abuse by their spouse. Moreover, psychological spousal abuse may increase due to spousal disharmony resulted from the burden of large family size and economic crisis which may also be provoked by an increase in the age of women.

Unsurprisingly, the residence was found to be an important predictor in affecting the magnitude of psychological spousal abuse during pregnancy. It revealed that women from rural areas were 2.95 times (AOR= 2.95, 95%CI: 1.11-7.86) more likely to have experienced psychological spousal abuse during pregnancy compared to urban women. This result is congruent with other studies conducted earlier^{45, 46}. A plausible explanation is that those women who participated in the study from rural residences may not have accessed different information that deals with gender equality, women's rights, and violence reduction strategies.

Our analysis indicated that partners' age was another determinant factor that positively affects the experience of psychological spousal abuse during pregnancy. Partners' who belong to the age interval of 20-31 years had the odds of 2.68 to commit psychological abuse than those who are in the age class of 32-60 years (AOR: 2.68, 95%CI: 1.25-5.75). Being young in age is one of most consistent factors associated with a man's increased likelihood of committing abuse against his partner^{33, 47}. This might be because young partners are highly likely to engage in crime and violent acts which peaks in adolescent⁴⁸.

The odds of psychological spousal abuse among pregnant women who did not desire the current pregnancy was 3.55 (95%CI: 1.08-11.66) times higher

compared with those who desire the pregnancy. The risk of psychological spousal abuse is higher if women reporting an unintended pregnancy and have been demonstrated in prior studies (49). This may be due to the fear of taking the responsibility to care for both the mother and the newly coming child ⁴⁵.

Once more, interestingly, this study yielded that women who have no previous history of abortion had the odds of 2.79 to be victims of psychological abuse by their spouse during pregnancy compared with those who have abortion history (AOR: 2.79, 95%CI: 1.13-6.89). There is no study consistent with this finding as per our review. This could be explained by the assumption that if the woman has a prior history of abortion the husband will have a feeling to support and care for his wife other than abusing her because of the fear in the reoccurrence of pregnancy loss.

Limitations of the study

We did not follow up on the full course of the pregnancy, which may tend to lower the magnitude.

Implications of the study

The evidence from this finding calls upon policymakers and program managers to play a role in reducing the problem and its bad consequences through integrating the screening of violence in reproductive health services, community mobilization, providing survivor services including psychosocial counseling and support from friends and family can help them to move forward.

CONCLUSIONS

The result of this study indicated that psychological spousal abuse during pregnancy is quite common in Ethiopian women. Residence, age of partner, mother's age, unwanted pregnancy, and history of abortion were significantly associated factors with the experience of psychological spousal abuse during pregnancy period. Therefore, based on our findings, we recommend that by taking into account the multitude of negative consequences of psychological violence on birth outcomes, immense efforts have to be made to mitigate the problem through designing effective and appropriate measures like provision of family planning to prevent unwanted pregnancy.

ABBREVIATIONS

ANC: Antenatal Care; AOR: Adjusted Odds Ratio; CI: Confidence Interval; EPI: Epidemiological Information; IPV: Intimate Partner Violence; OR: Odds Ratio; SPSS: Statistical Package for Social Science; WHO: World Health Organization.

Declarations

ACKNOWLEDGMENTS

We are highly indebted to Debre Markos town health office for permitting to conduct the study and providing the necessary preliminary information while conducting this study. We would also like to extend our appreciation to the study participants, supervisors and data collectors.

Funding

The author(s) received no specific funding for this work. Availability of data and materials

The dataset analyzed during the current study available from the corresponding author on reasonable request.

Authors' contributions

ZN wrote the proposal, participated in data collection, analyzed the data, drafted the paper and prepared the manuscript, HY, FA, AG, and ZA approved the proposal with few revisions, participated in data analysis and revised subsequent drafts of the paper. All the authors read and approved the final manuscript.

Ethics approval and consent to participate

Ethical clearance and approval were obtained from the Institutional Review Board of the University of Gondar. An official letter of cooperation was written to the Debre Markos town health office. Prior to interviewing, informed verbal consent was obtained from each of the participants after clear and detailed explanation of the purpose, risks, and benefits of the study. During data collection, mothers experiencing psychological violence have received appropriate information, education and counseling. Participation was on a voluntary basis and data were kept anonymous.

Consent for publication

Not applicable

Competing interests

The authors have declared that they have no competing of interests.

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REFERENCES

1. World Health Organization. WHO multi-country study on women's health and domestic violence against women: summary report of initial results on prevalence, health outcomes and women's responses 2005.
2. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *The lancet*. 2006;368(9543):1260-9.
3. AllModallal H. Psychological partner violence and women's vulnerability to depression, stress, and anxiety. *International journal of mental health nursing*. 2012;21(6):560-6.
4. Montero I, Ruiz-Perez I, Escriba-Aguir V, Vives-Cases C, Plazaola-Castano J, Talavera M, et al. Strategic responses to intimate partner violence against women in Spain: a national study in primary care. *Journal of epidemiology and community health*. 2012;66(4):352-8.
5. Organization WH. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence: World Health Organization; 2013.
6. Garcia-Moreno C, Jansen H, Ellsberg M, Heise L, Watts C. WHO multi-country study on women's health and domestic violence against women. Geneva: World Health Organization. 2005;204:1-18.
7. Silva EP, Ludermir AB, Araujo TV, Valongueiro SA. Frequency and pattern of intimate partner violence before, during and after pregnancy. *Revista de saude publica*. 2011;45(6):1044-53.
8. Lohman BJ, Neppel TK, Senia JM, Schofield TJ. Understanding adolescent and family influences on intimate partner psychological violence during emerging adulthood and adulthood. *Journal of youth and adolescence*. 2013;42(4):500-17.
9. Elghossain T, Bott S, Akik C, Obermeyer C. Prevalence of intimate partner violence against women in the Arab world: a systematic review. 2019.
10. Ribeiro MR, da Silva AA, MT EA, Batista RF, de Rocha LM, Schraiber LB, et al. Psychological violence against pregnant women in a prenatal care cohort: rates and associated factors in Sao Luis, Brazil. *BMC pregnancy and childbirth*. 2014;14:66.
11. Zorrilla B, Pires M, Lasheras L, Morant C, Seoane L, Sanchez LM, et al. Intimate partner violence: last year prevalence and association with socio-economic factors among women in Madrid, Spain. *European journal of public health*. 2010;20(2):169-75.
12. Laurie S, Ramiro MA MSc, Fatma Hassan MD PhD. Risk markers of severe psychological violence against women: a WorldSAFE multi-country study. *Injury Control and Safety Promotion*. 2004;11.
13. Gulec Oyekcin D, Yetim D, Sahin EM. Psychosocial factors affecting various types of intimate partner violence against women. *Turk psikiyatri dergisi = Turkish journal of psychiatry*. 2012;23(2):75-81.
14. Al-Tawil NG. Association of violence against women with religion and culture in Erbil Iraq: a cross-sectional study. *BMC Public Health*. 2012;12:800.
15. Central Statistical Agency (CSA) [Ethiopia] and ICF. Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia, and Rockville, Maryland, USA CSA and ICF; 2016.
16. Semahegn A, Mengistie B. Domestic violence against women and associated factors in Ethiopia; systematic review. 2015.
17. Safranoff A. [Psychological violence against women: What factors increase the risk of this kind of intimate partner abuse?]. *Salud colectiva*. 2017;13(4):611-32.
18. Abramsky T, Watts CH, Garcia-Moreno C, Devries K, Kiss L, Ellsberg M, et al. 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(1):109.
19. Zakar R, Zakar MZ, Mikolajczyk R, Kramer A. Intimate partner violence and its association with women's reproductive health in Pakistan. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics*. 2012;117(1):10-4.
20. Pallitto CC, Garcia-Moreno C, Jansen HA, Heise L, Ellsberg M, Watts C, et al. Intimate partner violence, abortion, and unintended pregnancy: Results from the WHO Multi-country Study on Women's Health and Domestic Violence. *International Journal of Gynecology & Obstetrics*. 2013;120(1):3-9.
21. Aduloju PO, Olagbuji NB, Olofinbiyi AB, Awoleke JO. Prevalence and predictors of intimate partner violence among women attending infertility clinic in south-western Nigeria. *European journal of obstetrics, gynecology, and reproductive biology*. 2015;188:66-9.
22. Groves AK, Moodley D, McNaughton-Reyes L, Martin SL, Foshee V, Maman S. Prevalence, rates and correlates of intimate partner violence among South African women during pregnancy and the postpartum period. *Maternal and child health journal*. 2015;19(3):487-95.
23. George J, Nair D, Premkumar NR, Saravanan N, Chinnakali P, Roy G. The prevalence of domestic violence and its associated factors among married women in a rural area of Puducherry, South India. *Journal of family medicine and primary care*. 2016;5(3):672-6.

24. Domenech Del Rio I, Sirvent Garcia Del Valle E. The Consequences of Intimate Partner Violence on Health: A Further Disaggregation of Psychological Violence-Evidence From Spain. *Violence against women*. 2017;23(14):1771-89.
25. Mendonca MFS, Ludermir AB. Intimate partner violence and incidence of common mental disorder. *Revista de saude publica*. 2017;51:32.
26. Navarro-Mantas L, Velasquez MJ, Lemus S, Megias JL. Prevalence and Sociodemographic Predictors of Intimate Partner Violence Against Women in El Salvador. *Journal of interpersonal violence*. 2018;886260518779065.
27. Elghossain T, Bott S, Akik C, Obermeyer CM. Prevalence of intimate partner violence against women in the Arab world: a systematic review. *BMC international health and human rights*. 2019;19(1):29.
28. Hawcroft C, Hughes R, Shaheen A, Usta J, Elkadi H, Dalton T, et al. Prevalence and health outcomes of domestic violence amongst clinical populations in Arab countries: a systematic review and meta-analysis. *BMC Public Health*. 2019;19(1):315.
29. Heise L, Pallitto C, Garcia-Moreno C, Clark CJ. Measuring psychological abuse by intimate partners: Constructing a cross-cultural indicator for the Sustainable Development Goals. *SSM-Population Health*. 2019:100377.
30. Kwaramba T, Ye JJ, Elahi C, Lunyera J, Oliveira AC, Sanches Calvo PR, et al. Lifetime prevalence of intimate partner violence against women in an urban Brazilian city: A cross-sectional survey. *PloS one*. 2019;14(11):e0224204.
31. Young-Wolff KC, McCaw B. Intimate partner violence and psychological distress: opportunities for prevention and early intervention among emerging adult women. Mary Ann Liebert, Inc., publishers 140 Huguenot Street, 3rd Floor New ...; 2019.
32. Devries K, Watts C, Yoshihama M, Kiss L, Schraiber LB, Deyessa N, et al. Violence against women is strongly associated with suicide attempts: evidence from the WHO multi-country study on women's health and domestic violence against women. *Social science & medicine*. 2011;73(1):79-86.
33. Organization WH. Understanding and addressing violence against women: Intimate partner violence. World Health Organization, 2012.
34. Pico-Alfonso MA. Psychological intimate partner violence: The major predictor of posttraumatic stress disorder in abused women. *Neuroscience & Biobehavioral Reviews*. 2005;29(1):181-93.
35. Lencha B, Ameya G, Baresa G, Minda Z, Ganfure G. Intimate partner violence and its associated factors among pregnant women in Bale Zone, Southeast Ethiopia: A cross-sectional study. *PloS one*. 2019;14(5):e0214962.
36. Makayoto LA, Omolo J, Kamweya AM, Harder VS, Mutai J. Prevalence and associated factors of intimate partner violence among pregnant women attending Kisumu District Hospital, Kenya. *Maternal and child health journal*. 2013;17(3):441-7.
37. Laelago T, Belachew T, Tamrat M. Prevalence and associated factors of intimate partner violence during pregnancy among recently delivered women in public health facilities of Hossana town, Hadiya zone, southern Ethiopia. *Open Access Library Journal*. 2014;1(07):1.
38. Berhanie E, Gebregziabher D, Berihu H, Gerezgiher A, Kidane G. Intimate partner violence during pregnancy and adverse birth outcomes: a case-control study. *Reproductive health*. 2019;16(1):22.
39. Abate BA, Wossen BA, Degfie TT. Determinants of intimate partner violence during pregnancy among married women in Abay Chomen district, Western Ethiopia: a community based cross sectional study. *BMC women's health*. 2016;16(1):16.
40. Rurangirwa AA, Mogren I, Ntaganira J, Krantz G. Intimate partner violence among pregnant women in Rwanda, its associated risk factors and relationship to ANC services attendance: a population-based study. *BMJ open*. 2017;7(2):e013155.
41. Ribeiro MRC, da Silva AAM, de Britto MTSS, Batista RFL, de Rocha LMLN, Schraiber LB, et al. Psychological violence against pregnant women in a prenatal care cohort: rates and associated factors in São Luís, Brazil. *BMC pregnancy and childbirth*. 2014;14(1):66.
42. Onoh R, OUJ U, Ezeonu P, Onyebuchi A, Lawani O, Agwu U. Prevalence, pattern and consequences of intimate partner violence during pregnancy at Abakaliki Southeast Nigeria. *Annals of medical and health sciences research*. 2013;3(3):484-91.
43. Andarge E, Shiferaw Y. Disparities in intimate partner violence among currently married women from food secure and insecure urban households in South Ethiopia: a community based comparative cross-sectional study. *BioMed research international*. 2018;2018.
44. Semahegn A, Mengistie B. Domestic violence against women and associated factors in Ethiopia; systematic review. *Reproductive health*. 2015;12(1):78.
45. Biffitu BB, Dachew BA, Tadesse Tiruneh B, Zewoldie AZ. Domestic violence among pregnant mothers in Northwest Ethiopia: prevalence and associated factors. *Advances in Public Health*. 2017;2017.
46. Naved RT, Persson LÅ. Factors associated with physical spousal abuse of women during pregnancy in Bangladesh. *International family planning perspectives*. 2008:71-8.
47. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. *The lancet*. 2002;360(9339):1083-8.
48. Capaldi DM, Knoble NB, Shortt JW, Kim HK. A systematic review of risk factors for intimate partner violence. *Partner abuse*. 2012;3(2):231-80.
49. Martin-de-Las-Heras S, Velasco C, de Dios Luna J, Martin A. Unintended pregnancy and intimate partner violence around pregnancy in a population-based study. *Women and birth*. 2015;28(2):101-5.