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Clinics in Mother and Child Health

Research Article

Prevalence of Domestic Violence and Associated Factors among Antenatal Care Attending Women at Robe Hospital, Southeast Ethiopia

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ABSTRACT

Introduction: Globally domestic violence against women is one of the social and public health problem occurring during pregnancy in the form of sexual, physical, or psychological violence imposed by the current or former male intimate partner. Therefore, this survey aims to assess the prevalence of domestic violence and associated factors among antenatal attending women at Robe hospital, southeast Ethiopia, 2019.

Method: An institutional based cross-sectional study design was conducted from April 25/2019 to May 20/2019 among 385 antenatal care-attending women at Robe hospital. Data was collected using face-to-face interview. Bivariate analysis was carried out to examine the associations between independent variable and domestic violence during pregnancy. Those variables with p-values of 0.05 or less were entered into multivariable logistic regression to manage confounding variables. Finally, adjusted odds ratio with 95% of confidence interval and significance p value<0.05 was used to examine the association between the independent and dependent variables.

Result: Out of 385 study participants involved in the interview 375 completed the interview making the response rate as 97.4%. The overall prevalence of domestic violence in our study area is 24.5%. Partner alcohol intake, having unplanned pregnancy and having unwanted pregnancy are factors significantly associated with domestic violence among antenatal care attendants.

Conclusion and recommendation: The prevalence of domestic violence among ANC attending women at Robe hospital is high. Having partner who takes alcohol, having unplanned pregnancy and unwanted pregnancy are the factors significantly associated with domestic violence during pregnancy among antenatal care attending women. In collaboration with stakeholders, the zonal health department has to mitigate domestic violence during pregnancy through educating women how to prevent unplanned and unwanted pregnancy.

Keywords: Domestic violence; Pregnancy; Physical violence; Sexual violence; Psychological

ABBREVIATIONS

ANC: Antenatal care; MMR: Maternal Mortality Ratio; EDHS: Ethiopian Demographic HealthSurvey; CI: Confidence Interval; OR: Odds Ratio; AOR: Adjusted Odds Ratio; IPV: Intimate Partner Violence; DV: Domestic violence

INTRODUCTION

According to the United Nations definition violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life[1]. Domestic violence (DV) against women is one of the social and public health problems globally [2]. DV during pregnancy is the sexual, physical, or psychological violence, imposed on a pregnant woman by a current or former male

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Received: October 09, 2019; **Accepted:** October 23, 2019; **Published:** November 01, 2019

Citation: Tulu C, Kiflu E, Hirkisa D, Kedir Z, Abdurahim L, Ganfure G, et al. (2019) Prevalence of Domestic Violence and Associated Factors among Antenatal Care Attending Women at Robe Hospital, Southeast Ethiopia. Clinics Mother Child Health. 16:337. DOI: 10.35248/2090-7214.19.16.337

intimate partner [3]. On the other hand, gender-based violence includes all other forms of violence such as trafficking in women, rape during war, female infanticide, honor killing, female genital mutilation (FGM) and others [4,5].

Violence during pregnancy has devastating health and social consequences, both for the woman and for the developing fetus [6,7]. Unplanned pregnancies, pregnancy-related symptom distress like antenatal, intranatal and postnatal depression, insufficient prenatal care, induced abortion, spontaneous abortion, gestational weight gain, intrauterine fetal growth restriction, pregnancy-induced hypertension, antepartum hemorrhage and STIs including HIV/AIDS are the most frequent adverse maternal health-related outcomes after DV during pregnancy [8,9].

Different studies have revealed that 20% [10] to 68% [11] of women aged between 15-49 years had experienced sexual, physical or both forms of violence from a male partner in their lifetime. On the other hand, population-based studies indicated that the prevalence of DV ranges from 24% [12] in Brazil to 42% in South Africa [13]. Therefore, the objective of this study is to assess the prevalence of DV and associated factors among antenatal care attending women at Robe hospital, southeast Ethiopia.

METHOD

Study area

The study was conducted in Bale Robe hospital which is located in South-East Ethiopia. Robe, the Zonal city, is located 435 km far from the capital town of Ethiopia; Addis Ababa.

Study design and study period

The institutional-based cross-sectional study design was conducted from April 25 to May 20, 2019, at Robe hospital.

Source and study population

All pregnant women attending ANC at Robe hospital were the source population and all pregnant Women attending ANC during the actual data collection period were our study population.

Sample size determination and sampling procedure

With the basic assumption of 95% confidence interval (CI), 5% margin of error and 35% prevalence of DV in Oromia region [14] were used to determine sample size and 10% of non-response rate was added to the sample making the final calculated sample size 385. We reviewed the ANC service reports of the previous 3 months and the average number of pregnant women who visited the ANC Clinic per month which was 980. Then a systematic random sampling technique was used to select study participants. The lottery method was used to select the first mother. Finally, every third intervals of pregnant women were selected based on their visiting order until the final sample met.

Data collection tools and quality assurance

The questionnaire containing socio-demographic characteristics and obstetrics variables were used after the pretest. Data were collected using a face-to-face interview. To assess the presence of domestic violence, the WHO multi-country study on women's health and DV against pregnant women were used [15]. The response to each question was dichotomized into either "yes" or "no" response. Accordingly, participants who respond "Yes" to any of the five questions on physical intimate partner violence and/or three questions on sexual intimate partner violence, and/or four questions on emotional intimate partner violence during pregnancy was considered as incident cases of DV victimization.First, the questionnaire was prepared in English and then translated to Afan Oromo and Amharic language by language experts. Then, to check the consistency, the questionnaire was translated into English from the local language. The questionnaire was pretested on 5% of the sample at Goba referral hospital and corrections were made. Half-day training was given to the data collectors. The investigators were supervising the data collection process.

Inclusion and exclusion criteria

All pregnant women attending ANC at Robe hospital during the actual data collection period were included in our study but those Pregnant women on labor and had danger signs of pregnancy were excluded.

STUDY VARIABLES

Dependent variable

Domestic violence.

Independent variable

Socio-demographic factors, Economic factors, Women's attitude towards violence, Husband's socio-demographic factors and Behavioral factors.

DATA PROCESSING AND ANALYSIS

The data were checked for completeness, coded and entered into EPI INFO version 7, then exported to SPSS version 21 for analysis. Means, frequencies, and percentages were used to summarize and present the finding. Bivariate analysis was carried out to examine the associations between the independent variables and DV during pregnancy. Those variables with p values of 0.05 or less were entered into a multivariable logistic regression to manage confounding variables. Finally, the adjusted odds ratio (AOR) with 95% CI and significance p value<0.05 were used to examine the association between the independent and dependent variables.

OPERATIONAL DEFINITIONS

Physical violence

Physical violence means presumed to have taken place when a woman/participant provided "Yes" answers to the 5 questions that inquired her whether she was 1) thrown at something that

could hurt, 2) pushed or shoved, 3) hit with the fist or something else that could hurt, 4) kicked, dragged, beaten up, choked or burned on purpose; and 5) if a gun, knife or any other weapon was used against her [15].

Sexual violence

Sexual violence means presumed to have taken place when a woman is physically forced to have sexual intercourse against one's will, or having sexual intercourse because of being afraid of what a partner might do, or being forced to do something sexual one has found degrading or humiliating.

Emotional violence

Emotional violence is defined as being insulted or made to feel bad about one-self, humiliated or belittle in front of others, intimidated or scared on purpose (for example by a partner yelling and smashing things), or threatened with harm (directly or indirectly in the form of a threat to hurt someone the respondent cares about) [15].

Domestic violence

Using WHO multi-country study if the women respond "Yes" to any one of the five questions on physical violence and/or three questions on sexual violence, and/or four questions on sexual violence during pregnancy was considered as incident cases of domestic violence victimization [15].

ETHICAL CLEARANCE

Ethical clearance was obtained from the Goba referral hospital community based education office. Then, the letter of permission was submitted to Robe hospital. Finally, by explaining the purpose of the study informed verbal consent was secured for each study participant.

RESULTS

Socio-demographic factors

Out of the 385 ANC attending women involved in the survey, 375 completed the interview making the response rate of 97.4%. From 375 Antenatal care (ANC) attending women participated in Study 312(83.2%) age between 20-34 years with the mean age of 25.2(± 5.2). Regarding ethnicity 250(66.7%) are Oromo ethnic group and 231(61.6%) are Muslim (Table 1).

Table 1: Sociodemographic distribution of ANC attending women at Robe Hospital, Southeast Ethiopia, 2019(n=375) (Note-Others: Daily laborer, Student, Unemployed Others®= Gurage, Wolayita and Tigrie Others® Catholic or protestant).

Age of respondents	**Frequency**	**Percentage (%)**	**Religion of respondent**	**Frequency**	**Percentage (%)**
<20 years	36	9.6	Muslim	231	61.6
20-34 years	312	83.2	Orthodox	113	30.1
>34 years	27	7.2	others©	31	8.3
Marital status	**Frequency**	**Percentage (%)**	**The ethnicity of the respondent**	**Frequency**	**Percentage (%)**
Married	359	93.7	Oromo	250	66.7
Single/Widowed/Divorced	16	4.3	Amhara	103	27.5
Educational status of women	**Frequency**	**Percentage (%)**	Others®	22	5.9
Unable to read and write	63	16.8	Occupational status	Frequency	Percentage (%)
Primary school	181	48.3	Government employee	35	9.3
Secondary school	97	25.9	Merchant	88	23.5
Diploma and above	34	9.1	Farmer	74	19.7
Residency area	Frequency	Percentage (%)	Housewife	144	38.4
Urban	262	69.9	Others	34	9.1

Rural	**113**	**30.1**	**Social support level**	**Frequency**	**Percentage** (%)
Husband educational status	Frequency	Percentage (%)	High social support	210	56
Unable to read and write	30	8	Moderate social support	141	37.6
Primary school	161	42.9	Low social support	24	6.4
Secondary school	**94**	**25.1**	**Partner alcohol taking the status**	**Frequency**	**Percentage** (%)
Diploma and above	90	24	Yes	49	13.1
			No	326	86.9

Obstetrics related variables

From 375 study participants attending ANC, 321(85.6%) had planned pregnancy, 178 (47.5%) had first ANC visit and 41 (10.9%) had history of abortion (Table 2).

Table 2: Obstetrics care-related factors among ANC attending women at Robe Hospital, Southeast Ethiopia, 2019(n=375).

Variable	**Frequency**	**Percentage** (%)
Was the pregnancy planned		
Yes	321	85.6
No	54	14.4
Was the pregnancy wanted	Frequency	Percentage (%)
Yes	342	91.2
No	33	8.8
Number of ANC visit	Frequency	Percentage (%)
First visit	178	47.5
Second visit	103	27.5
Third visit	51	13.6
Fourth and above visit	43	11.4
History of abortion	Frequency	Percentage (%)
Yes	41	10.9
No	334	89.1
Gravidity of the women	Frequency	Percentage (%)
Primigravidarum	113	30.1
Multigravidarum	262	69.9

Prevalence of domestic violence

Regarding violence, from 375 study participants attending ANC 61(16.3%) encountered physical violence, which is followed by psychological violence accounting 44(11.7%). The overall prevalence of domestic violence accounts 24.5% (Table 3).

Table 3: Shows the distribution of violence during pregnancy among ANC followers in Robe Hospital, Southeast Ethiopia, 2019.

Variables	Frequency	Percentage (%)
Prevalence of psychological violence		
Yes	44	11.7
No	331	88.3
Prevalence of physical violence	Frequency	Percentage (%)
Yes	61	16.7
No	314	83.7
Prevalence of sexual violence	Frequency	Percentage (%)
Yes	34	9.1
No	341	90.9
The overall prevalence of domestic violence	Frequency	Percentage (%)
Yes	92	24.5
No	293	75.5

Factors associated with prevalence of domestic violence

In bivariate logistic analysis those variables significantly associated were exported to multivariable logistic regression analysis to control confounding factors. Those variables significantly associated in bivariate analysis are marital status, level of social support, partner's alcohol intake status, having unplanned and unwanted pregnancy. Then, these variables are entered into multivariable logistic regression analysis to adjust confounding factors. Then, the following variables are significantly associated with prevalence of domestic violence among ANC attending women.

Those women whose partner takes alcohol are 3 times more likely to experience domestic violence during pregnancy compared to their counterpart (AOR=3.33, 95% CI: 1.22-9.11). The odds of experiencing domestic violence during pregnancy is almost 2 times more likely to encounter women with unplanned pregnancy compared to those who had planned pregnancy (AOR=1.76, 95% CI:1.32-2.88). Those women with unwanted pregnancy are 1.12 times more likely to encounter domestic violence among ANC attending women compared to their counterpart (AOR=1.12, 95% CI: 1.06-2.28) (Table 4).

Table 4: Bivariable and Multivariable logistic regression analysis for factors associated with the prevalence of Domestic violence among antenatal care followers at Robe Hospital, Southeast Ethiopia, 2019 (n=375).

Variable	Domestic violence		Crude OR with 95% CI	
Marital status of the respondent	**Yes**	**No**		**Adjusted OR with 95% CI**
Married	80	277	1	1
Single/divorced/widowed	10	6	5.63(1.99-15.96)	0.12(0.07-1.72)
Level of social support	Yes	No	Crude OR with 95% CI	Adjusted OR with 95% CI
High social support	44	166	1	1

Moderate social support	36	105	0.77(0.47-1.28)	1.00(0.58-1.75)
Low social support	12	12	0.27(0.11-0.63)	0.39(0.15-1.03)
Partners alcohol intake	Yes	No	Crude OR with 95% CI	Adjusted OR with 95% CI
Yes	6	43	2.57(1.06-6.25)	3.33(1.22-9.11)*
No	86	240	1	1
Was the pregnancy planned	Yes	No	Crude OR with 95% CI	Adjusted OR with 95% CI
Yes	65	256	1	1
No	27	27	0.25(0.14-0.46)	1.76(1.32-2.88)*
Was the pregnancy wanted	Yes	No	Crude OR with 95% CI	Adjusted OR with 95% CI
Yes	69	273	1	1
No	23	10	0.11(0.05-0.24)	1.12(1.06-2.28)*

1: Reference; * p value less than or equals to 0.05

DISCUSSION

The overall prevalence of DV during pregnancy among ANC followers in our study area is 24.5%, which is in line with the study conducted in Iran (22.9%) [16]. Study conducted in Northwest Tanzania revealed that the prevalence of DV is 61%, which is higher than the current finding [17]. Another study conducted in Ghana indicated that about 34% of respondents had experienced IPV in the past 12 months, which is higher than our finding [18]. This variation could be attributed by study time variation, socio-demographic factors, educational level of the women and cultural difference

A systematic review conducted in Ethiopia identified that the prevalence of DV is 26.1% which is similar to the current finding but lower than Oromia (35%) and Amhara (29%) regional states [14]. Likewise, another study done in the Northwest part of the country revealed that the prevalence of DV among pregnant women is 25.4%. This finding is in line with the current finding (25.4%) [19]. This similarity could be resulted because of the same socio-demographic factors and methodological approaches.

Those women whose partner takes alcohol are 3 times more likely to experience DV during pregnancy compared to their counterpart (AOR=3.33, 95% CI: 1.22-9.11). This finding is consistent with the systematic meta-analysis done in Ethiopia [14]. This similarity could be attributed because of the same socio-cultural background.

Women with unplanned pregnancy were nearly twice as liable to DV as those with planned pregnancies (AOR=1.76, 95% CI: 1.32-2.88). Also, this finding is in line with study done in the Northwest part the country Ethiopia [19].

Those women with unwanted pregnancy are 1.12 times more likely to encounter domestic violence among ANC attending women compared to their counterparts (AOR=1.12, 95% CI: 1.06-2.28).

CONCLUSION

The overall prevalence of DV among ANC attending women in Bale Robe hospital is high. Having a partner who takes alcohol, having an unplanned pregnancy and unwanted pregnancy are factors significantly associated with DV during pregnancy. In collaboration with the stakeholders Bale zone health office has to mitigate domestic violence during pregnancy by empowering women through education to prevent unwanted and unplanned pregnancy and address any form of violence during ANC screening and report to the concerned body.

COMPETING INTERESTS

The authors declare that they have no competing interests.

ACKNOWLEDGMENT

We would like to express our gratitude to Madda Walabu University Midwifery department for creating this opportunity to conduct this research project. We would also like to express our heartfelt gratitude to the Robe hospital for providing permission to conduct this survey. Finally, we would like to acknowledge our study participants for providing us with pertinent information.

AUTHORS' CONTRIBUTIONS

CT, EK, DH, ZK, LA, GG, JM, AM, KS and GF designed the study and were involved in drafting, statistical analysis and correcting the manuscript. All authors involved in editing the manuscript critically. All the authors critically apprised and read

for important intellectual content. Finally, they have approved the final version of the manuscript.

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