



**PREVALENCE AND ASSOCIATED FACTORS OF DOMESTIC VIOLENCE AMONG  
MARRIED WOMEN IN RURAL EASTERN ZONE TIGRAY, ETHIOPIA 2015**

**Gebremedhin Gebreziabiher<sup>1\*</sup> and Fitiwi Tinsae<sup>2</sup>**

<sup>1</sup>Midwifery Department, College of Health Science, Adigrat University, Adigrat, Ethiopia.

<sup>2</sup>Nursing Department, College of Health Science, Adigrat University, Adigrat, Ethiopia.

**\*Corresponding Author: Gebremedhin Gebreziabiher**

Midwifery Department, College of Health Science, Adigrat University, Adigrat, Ethiopia.

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**ABSTRACT**

**Background:** Violence against women is usually targeted at women and girls due to their unequal treatment nature in society. Wife beating, the most widespread form of domestic violence, has adverse consequences on the health and wellbeing of women and is a major cause of disability and death in many countries. **Objective** of the study was to assess the prevalence and associated risk factors of domestic violence against women in Eastern Zone of Tigray, Ethiopia 2015. **Methods:** Community based cross-sectional study was conducted on 820 married women. Sample size was calculated by using single population proportion formula. Systematic random sampling was used to select study subjects. Data was collected door to door by interview using pre tested structured questionnaire. Data entered, cleaned and analysis was done by using SPSS version 20. Descriptive and logistic regression analyses were performed. Multiple logistic regression analysis was used to identify independent predictors of dependent variable. **Result:** the prevalence of overall domestic violence, physical violence, and sexual violence were 46%, 39.6% and 27.7 % respectively. Among the type of physical violence slapping was the commonest type account 32.8 %. Women husband's smoking, husband's drinking alcohol, educational level of husband and family monthly income were remaining significantly predictors of sexual violence; and Husband cigarette smoker, husband alcohol drunker, Husbands age and Number of children were remaining significantly predictors of sexual violence.

**KEYWORDS:** Domestic violence, Married Women, eastern zone, North Ethiopia.

**INTRODUCTION**

According to the World Health Organization, violence against women is a universal phenomenon that persists in all countries of the world, and the perpetrators are often well known to the victims/survivors. Violence against women can be defined either broadly or narrowly. It can either encompass a variety of behaviors that are referred to as violence or simply behaviors that are specific to a given societal and/or geographical context.<sup>[1]</sup>

Some women might not even realize that they are victims/survivors of violence and may not consider certain behaviors as violent.<sup>[2]</sup> Yet just because an abused woman accepts a violent behavior as normal, society in general would not agree.<sup>[3]</sup> Until recently, most governments and policy-makers viewed violence against women as a relatively minor social problem affecting a limited number of women. The general view was that cases of violence could be appropriately addressed through the social welfare and justice systems. During the past decade, however, the combined efforts of grass-roots and international women's organizations,

international experts, and committed governments have resulted in a profound transformation in public awareness regarding this issue.<sup>[4]</sup> Violence against women is usually targeted at women and girls due to their unequal treatment nature in society. It can take place in the home, on the streets, in schools, in the workplace, in farm areas, refugee camps which is perpetrated by persons in positions of power.<sup>[5]</sup> Wife beating, the most widespread form of domestic violence, has adverse consequences on the health and wellbeing of women and is a major cause of disability and death in many countries. In the past few years, it has been widely reported in developing countries' contexts, where patriarchal family norms are common and patriarchal gender relations were reinforced by traditional cultural, legal, and perhaps religious legacies.<sup>[6]</sup>

Partner violence occurs in all countries and transcends social, economic, religious, and cultural groups. Around the world at least one woman in every three has been beaten, coerced into sex, or otherwise abused in her lifetime.<sup>[7]</sup> WHO multi-country study on women's health and domestic violence against women in 2004 documented the result of data from 10 countries (15

sites), including Ethiopia. It had shed a new light on the prevalence of violence against women in countries where few data were previously available. The high rates of gender based violence documented by the study (up to 62%) experienced by girls and women were of great concern, especially in the era of HIV epidemic. Studies conducted in Sub-Saharan African countries showed varied alarming results about the problem of gender based violence; ranging from 20% to as high as 71% (Ethiopia) reported lifetime prevalence of sexual or/and physical violence.<sup>[8]</sup>

Studies in Africa have reported that about half of all ever married women in Zambia, 46% in Uganda, 60% in Tanzanian, 42% in Kenya, and a high of 81% in Nigeria have experienced some form of violence in their lives.<sup>[9]</sup> A recent study by the WHO (2005) showed that 71% of Ethiopian women experience either physical or sexual violence. Despite this high prevalence of violence, not many women are aware of their rights and do not report such incidents to the police,<sup>[10]</sup>

There has been little research on domestic violence against women in Ethiopia especially in Tigray. In Tigray, even the existing literatures only depicts the prevalence and characteristics of domestic violence against women among refugee camps and college students but, data related to women and community-based are limited however; there are evidences that indicate the pervasiveness of the problem. Understanding the prevalence of the problems and the reasons behind domestic violence among women is crucial. So that this study was aimed to assess the prevalence and associated factors of domestic violence among married women in Eastern Zone Tigray, Ethiopia, 2015. Therefore this study will have a significance input in the formulation of the appropriate strategies in the study settings and the region at large.

## METHODS

### Study area and period

The study was conducted in eastern zone of Tigray region; eastern zone have seven woreda /district/ and two town administration. The town of eastern zone administration Adigrat town located at a Distance 894 Km from the capital city Addis Ababa. Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia<sup>[11]</sup>, Eastern Zone has a total population of 755,343, of whom 359,638 are men and 395,705 women. Married women of reproductive age group are around 41,234. The study was conducted from March 2015-June 2015.

### Study design, population and sampling

Community-based cross-sectional study was employed. All married women of reproductive age group living in the selected kebelles Eastern Zon of Tigray region. Married women of critically ill during the data collection were excluded from the study. Single population proportion formula was used to calculate the sample size on the assumption of previous studies the prevalence of physical violence among women at home 49 % in rural Meskan and Mareko district of Ethiopia<sup>[12]</sup>, 5% discrepancy and 95% confidence interval the result were 384. After that by considering 10% non-response rate and design effect of 2 the total sample size was 844 married women was employed. By using simple random sampling method from the seven woreda / district/ two woreda were selected and also randomly four tabias from the selected Woreda and two kebeles from the town administration one Kebelle was randomly selected. Finally systemic sampling method was used in the selected Tabias and Kebele to select participated in the study (see Figure 1).

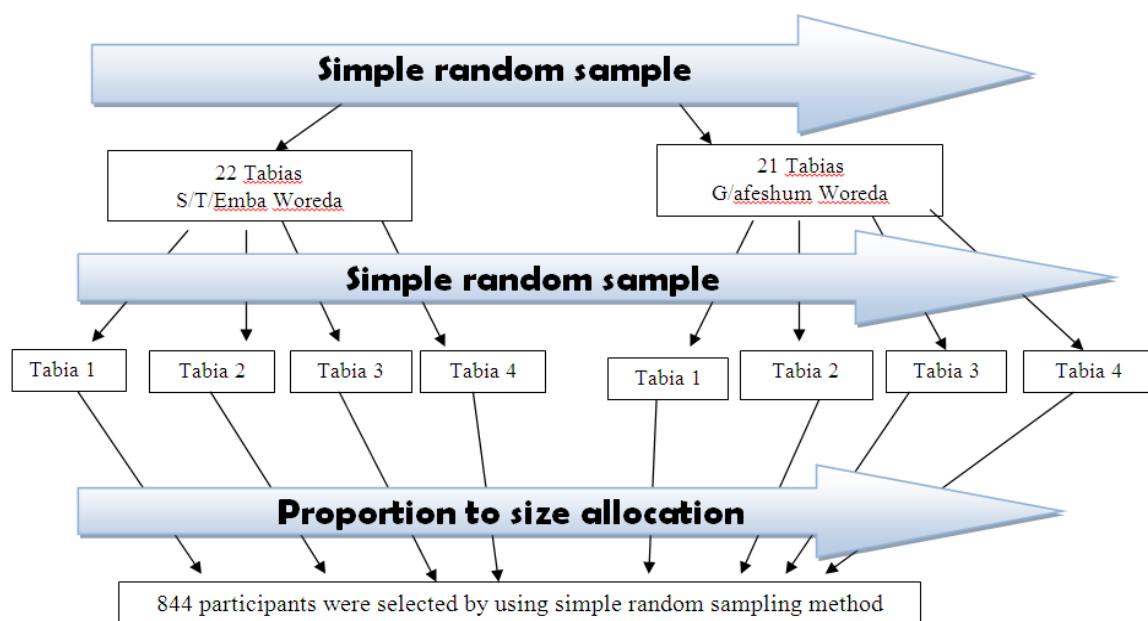


Figure 1: Schematic Sampling Technique in, Rural Eastern Zone of Tigray, North Ethiopia, 2015.

### Data collection tools and procedures

The data was collected by interviewing the study subjects using structured questionnaire that is adapted from different literature. It included questions related to prevalence and associated factors of domestic violence against women in, Eastern Zone. The questionnaire was first prepared in English and then translated in to Tigrigna and back translated in to English by different qualified individuals to check consistency. Ten diplomas in Midwives or Nurses as data collectors and three BSc midwives were assigned as supervisor in data collection process.

### Data quality control

To achieve good data quality, questionnaire was prepared in English and translated in to Tigrigna and back translated to English in order to keep consistency of the data. Structured questionnaire that is adapted from different literature was used. By the principal investigator training was given to the selected data collectors and supervisors for two days about the objective and process of data collection. Pre testing was done on 5% of the questionnaires on the non-selected tibias. Completeness questioner was checked by the supervision and incomplete was return back to complete at the same day.

### Data management and analysis

The data was coded, entered, cleaned and analyzed using SPSS V 20.0. Descriptive analysis was done to describe the study population. Frequencies, measures of central tendency and dispersion were used as appropriate. Binary logistic regression was used to test the significance of associations between predictor variables and the outcome variable. Odds ratio with 95% CI was calculated. All variables that have association on bivariate analysis were considered for inclusion in the multivariate analysis. Multivariate logistic regression

was used to control the possible confounding effect of selected variables and to determine the independent predictors. Statistical significance was declared at  $P \leq 0.005$ . Finally the results were presented in text, tables and graphs and interpreted accordingly.

### Ethical consideration

Ethical clearance and approval was obtained from the ethical review committee of Ad University and Letter of co-operation was written from Eastern Zone to each woreda. The necessary permission was also obtained from specific Tabia/kebell leaders. Informed consent was obtained from each respondent. All participants were informed about the purpose, being anonymity and the right to refuse at any stage of interview. Confidentiality of the responses was assured, and informed consent was obtained prior to each interview.

## RESULT

### Socio Demographic Characteristics

A total of 820 married women of reproductive age group had participated in the study with a response rate of 97.1%. Three hundred fifty six (43.4%) married women were between 20-30 years old. Majority 323 (39.4%) of the age of husband were from 34-43year. Pertaining to educational status, 311(37.9%) and 193 (23.5%) of married women were no education and able read and write respectively in addition to this, 215(26.2%) and 247(30.1%) their educational status of husbands were unable to read and write and primary school (1-8), respectively. During the study period, majority 701(85.5%) of the respondents was housewives. Of the total husband, 268(26.8%) and 28(3.4%) had drinking alcohol and smoking cigarette respectively. Three hundred two (36.8%) of the participants had household monthly income of less than or equal 1000 ETB [Table 1].

**Table 1: Socio- demographic characteristics' of merried women and their partner in Tigray region, 2015.**

Variables	Number	Percent
Age of wife		
20-30	356	43.4
31-40	323	39.4
>40	141	17.2
Age of husband		
24-33	216	26.3
34-43	323	39.4
44-53	180	22.0
>=54	101	12.3
Marital status		
first time	603	73.5
second and above	217	26.5
Religion		
Orthodox	771	94.0
Muslim	32	3.9
Catholic	9	1.1
Protestant	8	1.0
Age at first marriage		

9-14	89	10.9
15-29	446	54.4
20-24	249	30.4
>=25	36	4.4
Education status of husband		
no education	161	19.6
Able to read and write	215	26.2
primary school(1-8)	247	30.1
secondary school	153	18.7
higher education	44	5.4
Education status of wife		
no education	311	37.9
Able to read and write	193	23.5
primary school(1-8)	173	21.1
secondary school	123	15.0
higher education	20	2.4
Occupation status of wife		
un employed	701	85.5
Government employed	49	6.0
private employed	61	7.4
Others	9	1.1
Number of children		
1-3	355	43.3
4-6	360	43.9
>6	105	12.8
House hold monthly income		
≤1000	302	36.8
1001-2000	257	31.3
≥2001	261	31.8
Husband alcohol drinking		
Yes	220	26.8
No	600	73.2
Husband cigarette smoking		
Yes	28	3.4
No	792	96.6

### Prevalence of physical violence

The prevalence of physical violence among married women was 40%. Among the type of physical violence slapping, pushed, hit, beat, choked and threatened were 410(32.8 %), 56(6.8%), 98(12 %) , 61(7.4%) and 86 (10.5 %) respectively.

### Prevalence of Sexual violence

The prevalence of sexual violence among married women was 28 %. Among the type of sexual violence Physical violence for.sex, involve sexual intercourse and uncommon types intercourse were 199 (24.3 %), 80(9.8%) and 72(8.8 %) respectively.

### Domestic Violence

The overall prevalence of domestic violence among the married women was 46%.

### Factors related to physical violence

Binary and multiple logistic regressions were done to assess the predictors of physical violence among married women. Finally Husband smoking, husband alcohols

drinking, Educational level of husband and Family monthly income were remaining significantly predictors of sexual violence. women who had household monthly perceived income of between 1001 and 2000 ETB were 1.9 times higher on physical violence when compared with those who had greater than or equal to 2001 ETB [(AOR=1.961, 95% CI:1.341, 2.869)]. Women who had no education as compared with able to read and write, primary school complete, secondary school complete and had higher education were 10, 9, 7 and 6 times higher experience for physical violence respectively. As [(AOR=10.27, 95% CI: 2.40, 43.86), (AOR=9.05, 95% CI: 2.16, 37.84), (AOR= 7.81, 95% CI: 1.81, 33.67) and (AOR= 6.34, 95% CI: 1.57, 25.58)] respectively. Those women their husband drink alcohol were 2 times experienced for physical violence when compared with those their husband not drinking alcohol (AOR =2.67, 95% CI: 1.87, 3.81). Those married women their husband smoking cigarette was 3 times more experienced for physical violence when compared with their counterparts (AOR =3, 95% CI: 1.254, 7.264) [Table 2].

**Table 2: Related factors for physical violence among married women, Eastern zone, Tigray Ethiopia, 2015.**

Characteristics	Physical Violence		AOR (95% CI)
	Yes (%)	No (%)	
<b>Family monthly income</b>			
< 1000ETB	81(35.7%)	221(37.3%)	1
1001-2000ETB	89(39.2%)	168(28.3%)	1.96 (1.341,2.869)**
>2000ETB	57(25.1%)	204(34)	0.712(.474,1.070)
<b>Educational level of husband</b>			
no education	46(20.3%)	115(19.4%)	1
able to read and write	69(30.4%)	146(24.5%)	10.271(2.405,43.861)**
primary school	68(30%)	179(30.2%)	7.810(1.812,33.671)**
secondary school	44(19.4%)	109(18.4%)	9.054(2.166,37.842)**
higher education	0(0%)	44(7.4%)	6.347(1.575, 25.581)**
<b>Husband drinking alcohol</b>			
Yes	106(46.7%)	114(19.2%)	2.678(1.879,3.817)**
No	121(53.3%)	479(80.8%)	1
<b>Husband smoking</b>			
Yes	24(10.6%)	4(0.7%)	3.019(1.254,7.264)**
No	203(89.4%)	589(99.3%)	1

**Related factors for sexual violence**

Binary and multiple logistic regressions analysis were done to assess the predictors of sexual violence among married women. Finally Husband smoking, husband alcohol drinker, Husbands age and Number of children were remaining significantly predictors of sexual violence. women who had four up to six and above six children were 80% and 82% less on sexual violence when compared with those who had number of child from one up to three respectively [(AOR=0.2, 95% CI: (0.112, 0.4129),( AOR=0.18,95% CI: 0.104,0.323)]. Women their husband age from 34-43 years and  $\geq 54$

years were 3 and 4 times more experienced for sexual violence when compared with those who had age from 24-33years [(AOR=3.11, 95%CI:1.40, 6.86) ,(AOR=4.25,95% CI: 2.22,8.12)] respectively. Those women their husband drink alcohol were 24 times more experienced for sexual violence when compared with those their husband not drinking alcohol (AOR =24.46, 95% CI: 3.051,6.532). Those married women their husband smoking cigarette was 22 times more experienced for sexual violence when compared with their counterparts (AOR =22.58, 95% CI: 7.017, 72.676) [Table 3].

**Table 3: Related factors for sexual violence among married women, Eastern zone, Tigray Ethiopia, 2015.**

Characteristics	Sexual violence		AOR(95% CI)
	Yes (%)	No (%)	
<b>Number of children</b>			
1-3	144(43.4%)	21(43.2%)	1
4-6	135(41.5%)	225(45.5%)	0.21(0.11, 0.41)**
>6	49(15.1%)	56(11.3%)	0.18(0.10, 0.32)**
<b>Husbands age</b>			
24-33	85(26.2%)	131(26.5%)	1
34-43	112(34.5%)	211(42.6%)	3.11(1.4, 6.86)**
44-53	83(25.5%)	97(19.6)	1.7(0.84, 3.44)
$\geq 54$	45(13.8%)	56(11.3%)	4.25(2.21, 8.12)**
<b>Husband. alcohol</b>			
Yes	126(38.8)	94(19%)	24.46(3.05,6.53)**
No	199(61.2%)	401(81%)	1
<b>Husband smoking</b>			
Yes	20(6.2%)	8(1.6%)	22.58(7.01, 72.67)**
No	305(93.5%)	487(98.4%)	1

**DISCUSSION**

Violence against women is an important public health concern owing to its substantial consequences for women's physical, mental and reproductive health.<sup>[13]</sup> In this study an attempt has been made to assess the

prevalence and associated factors of domestic violence against women in, Eastern Zone, Tigray, Ethiopia.

In the current study the magnitude of domestic violence is 46 %. This is lower as compared with a report of Fagitalekoma Woreda 78.0 %, Ethiopia 2011, (68 %



rural Meskan and 71% Mareko District) and Bangladesh 62%.<sup>[14, 15, 16, and 17]</sup> The reason might be due to the time difference because in Ethiopia in all component of the sector like education and health sector have a good improvement in addition this the life style have also improvement from time to time. This is higher compared to a report of Nigeria 30.5%, Japan 15% and Brazil 37%.<sup>[18, 17]</sup> This difference could be due to the fact that economical level, educational level and life style of the population are quite difference. In addition to this more or less consistent with our finding, systemic review study conducted in Ethiopia was 51.7 %.<sup>[16]</sup>

In this study the prevalence of experiencing physical violence is 40%. This is lower compared to a report of WHO in Ethiopia (48.7%) and Tanzania provinces (46.7%)<sup>[13]</sup>, Indian 50%<sup>[19]</sup> and rural Meskan and Mareko District 49 %<sup>[15]</sup> and Fagitalekoma Woreda 58.4 %.<sup>[14]</sup> However, our finding is higher compared to studies done in South African (25%) and Rwandan (20%)<sup>[20, 21]</sup> and Peru and Tanzania indicated that the prevalence of physical violence ranges from 19-29%.<sup>[22]</sup> The discrepancies might be due to difference of study population. Differences in the study area in which this study was done in rural area of Ethiopia in which majority of the study participants were illiterate and an area where physical violence looks like as normal could be also a reason. In addition to this Study done in Gondar was 32.2 %, this is more or less consistent with this study.<sup>[10]</sup>

In this study the prevalence of sexual violence was 27.7 %. This is lower as compared to study done in Fagitalekoma Woreda 49.1 %, in Gonder 35.7 %, South Wollo zone 34.6 % and, rural Meskan and Mareko District 59 %, Bangladesh 42% and Brazil 34%<sup>[14, 10, 15 and 22]</sup>. The reason might be the women were from rural origin in which deep cultural practice is takes place so women may not report and don't worry of physical and sexual violence so this may make under or over reporting the findings. However, this is lower when compared with study done in Japan 13%. This might be due to socio cultural and societal perspectives and contexts of the population under study that differ between the nations.

Slapping was the most common type of physical violence (47.6%) based on the report of Shi Melba refugee camp and Sidama zone.<sup>[14]</sup> This was consistent with our finding in which women faced slapping by their husband or partner. In addition to this slapping was lower in Nepal compared with this study.<sup>[23]</sup>

In this study husbands' drinking alcohol was a predictor for experiencing physical violence and sexual violence (AOR =2.67, 95% CI: 1.87, 3.81). This is consistency with study conducted in Gondar, Fagitalekoma Woreda, systemic review done in Ethiopia and Sidama zone.<sup>[24, 14, 16 and 25]</sup>

In this study women education a predictor experience for physical violence and sexual violence. This is similar with study done in Sidama zone, Bangladesh, Systemic review done in Ethiopia and Ethiopia 2011.<sup>[26, 16, 27, 28, and 25]</sup>

### Limitation

This study faced the following limitation; since, physical and sexual violence is sensitive issue, there may be social desirable and recall biases. In addition, since the women were from rural origin in which deep cultural practice is takes place so women may not report and don't worry of physical and sexual violence so this may make under or over reporting the findings. So, it is better to consider this limitation in interpreting of this finding.

### CONCLUSIONS

The findings of this study indicated substantial prevalence of partner domestic violence that including physical and sexual violence. This indicated that almost one out of every two women was physically or sexually abused. The prevalence of physical violence among married women was 39.6%. Among the type of physical violence slapping account for 32.8 % .The prevalence of sexual violence among married women was 27.7 %. Slapped was the common type of physical violence. Husband's smoking, husband's drinking alcohol, Educational level of husband and family monthly income were remaining significantly predictors of sexual violence. Husband smoking, husband alcohol drunker, Husbands age and Number of children was remaining significantly predictors of sexual violence. Based on the findings of this study, women's affairs office needs attention at all levels of societal organization, stakeholders, professionals and other concerned bodies to implement strategies among partners on physical violence and sexual violence. District health office giving health information for the community about couple's awareness of husbands to reduce the intake of alcohol and smoking cigarettes because those substances are increasing the condition of domestic violence among married women. In addition to this the importance of equality provision of peer education at household and community level.

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