

Original Research Article

Empirical analysis of Domestic violence against women and potential risk factors in Ethiopia

ABSTRACT

Domestic violence against women persists to be a major challenge and a threat to women's empowerment in Ethiopia, while Ethiopia is among the countries which have legal and policy provisions to promote the rights of women and girls. This study was held based on data obtained from 2016 Ethiopia Demographic and Health Survey, to identify major risk factors associated with domestic violence against women in Ethiopia. Descriptive analysis result showed that out of 2663 sampled women involved in the study about 765(28.5%) were experienced domestic violence perpetrated by current husband or partner. A total of 191(25%) women were experienced emotional violence only, 143(18.7%) were experienced physical violence only, 37(4.8%) were experienced sexual violence only and about 394(51.5%) women were experienced more than one form of violence committed by current husband or partner. The multivariate logistic regression analysis revealed that husband's or partner's education level, sex composition of living child, alcohol consumption, wealth index and region had statistically significant ($P<0.05$) effect on domestic violence against women.

The results of our investigation have demonstrated that higher educational level and better economic status have been identified as protective factors against domestic violence. Domestic violence against women could be mitigated through enhancing access to better education, encouraging school completion, improving the economic status of women and organizing public educational campaigns that focus on changing gender related attitudes.

Keywords: Domestic violence, Logistic regression, Women, Intimate partner, Ethiopia

27 1. INTRODUCTION

28 Women across the world regardless of income, age or level of education, are subject to physical,
29 sexual, psychological and economic violence. Intimate partner violence accounts for the majority
30 of women's experiences of violence [1]. Violence against women harms families and
31 communities across generations and reinforces other violence prevalent in society. It is also
32 impoverishes women, their families, communities and nations. Violence against women is not
33 confined to a specific culture, region or country, or to particular groups of women within a
34 society [2].

35 Domestic violence is where one person tries to control and assert power over their partner
36 in an intimate relationship. It can be physical, emotional, financial or sexual abuse [3]. Although
37 domestic violence against women is pervasive worldwide, there is no universally accepted
38 definition or terminology [4]. It has also been used the terms "intimate partner violence," "wife
39 abuse" and "domestic violence" interchangeably to refer to the range of sexually,
40 psychologically, and physically coercive acts used against adult and adolescent women by
41 current or former male intimate partners [5].

42 According to council of Europe, domestic violence shall mean all acts of physical, sexual,
43 psychological or economic violence that occur within the family or domestic unit or between
44 former or current spouses or partners, whether or not the perpetrator shares or has shared the
45 same residence with the victim. As a result, the adopted definition includes both intimate partner
46 violence and intergenerational violence [6].

47 Domestic violence has serious adverse consequences for the physical, mental, reproductive
48 health of women and economy [7, 8, 9]. A number of women's advocacy groups around the
49 world have been working to draw more attention to the physical, psychological, and sexual abuse

50 of women and to stimulate action through supporting abused women, lobbying for legal reforms,
51 and challenging the widespread attitudes and beliefs that encourage violence against women
52 [10]. Many states have adopted or revised legislation on violence against women and, even
53 where legislation exists, it is often limited in scope and coverage, or is not enforced [11]. As
54 United Nation reported, about 119 countries have passed laws on domestic violence, 125 have
55 laws on sexual harassment and 52 have laws on marital rape. However, the existing domestic
56 violence laws are always impractical, or not implemented in ways that help women [1]

57 Despite all the efforts made by different women advocacy groups, Violence against women
58 and girls continues to be a global epidemic that kills, tortures, and maim physically,
59 psychologically, sexually and economically. It is one of the most pervasive of human rights
60 violations, denying women and girls equality, security, dignity, self-worth, and their right to
61 enjoy fundamental freedoms [12, 13]. As World Health Organization 2013 report indicated, the
62 global prevalence of physical and/or sexual intimate partner violence among all ever-partnered
63 women was 30%. The prevalence was highest in African, Eastern Mediterranean and South-East
64 Asia Regions, where approximately 37% of ever-partnered women reported having experienced
65 physical and/or sexual intimate partner violence at some point in their lives [14]. Moreover, a
66 survey conducted by the European Union across the 28 Member States on 42,000 women, by
67 questioning about their experiences of physical, sexual and psychological violence, including
68 incidents of intimate partner violence. According to the survey report, 22% of women had
69 experienced physical and/or sexual violence by a partner. Overall, 43 % of women had
70 experienced some form of psychological violence by an intimate partner, which includes other
71 forms of abuse alongside psychologically abusive behavior [15].

72 Domestic violence occurs in all countries but its prevalence differs greatly across the globe
73 and even within sub-Saharan Africa [16, 17]. Regardless of social, economic, religious and
74 cultural groupings, men have been identified as the major actors of domestic violence against
75 women [18]. Ethiopia is among the countries which have legal and policy provisions to promote
76 the rights of women and girls. These rights are enshrined in the Constitution and have direct
77 relevance to the right of women to be protected from domestic violence [19]. Ethiopia has also
78 ratified many of the international and continental agreements that promote and protect women's
79 rights. Furthermore, Ethiopia has established specific legal measures and actions to address
80 violence, including the revised family law in 2000 and the revised criminal code in 2005 [20].

81 In the presence of all the legal protections for women's right in Ethiopia, violence against
82 women and girls continues to be a major challenge and a threat to women's empowerment.
83 Violence against women is not only extremely rooted but also accepted rather than challenged
84 problem in Ethiopia [21] and about 71% of Ethiopian women experience either physical or
85 sexual violence or both [22].

86 A handful of studies about domestic violence were conducted in some parts of Ethiopia, in
87 order to demonstrate the prevalence and factors associated with it. Although, all the researches
88 had limitation in scope, or representing the nation and addressing major factors which are believe
89 to be related with domestic violence in the country. However, in the current study we utilized a
90 representative data on domestic violence collected for the first time by central statistical agency
91 (CSA) of Ethiopia. Since, a module of questions on domestic violence and most common form
92 of violence against women were not part of Ethiopia Demographic and Health Survey (EDHS)
93 questionnaires until 2016 [23]. Thus, our research manage to bridge the gabs noticed in previous

94 studies by applying appropriate statistical methods of analysis and identifying the main risk
95 factors associated with domestic violence against women in Ethiopia.

96 **2. MATERIALS AND METHODS**

97 **2.1 Data source**

98 This study was carried out based on data obtained from 2016 Ethiopia Demographic and Health
99 Survey. The 2016 Ethiopia Demographic and Health Survey (EDHS) is the fourth Demographic
100 and Health Survey to be conducted in Ethiopia and it is also unique from previous surveys due to
101 the inclusion of domestic violence module. Administratively, Ethiopia is divided into nine
102 geographical regions and two administrative cities. This cross-sectional study was designed to
103 generate nationally representative data out of randomly selected 16,650 households across
104 Ethiopia. The survey was held from January 18, 2016, to June 27, 2016 across the nine regions
105 and the two administrative cities. A total 15,683 female respondents aged 15 to 49 years were
106 involved in the survey and 5,860 women were interviewed regarding violence against women.
107 Three percent of women eligible for the domestic violence module could not be successfully
108 interviewed, mainly due to lack of privacy. Specially constructed weights were used to adjust for
109 the selection of only one woman per household and to ensure that the domestic violence
110 subsample was nationally representative [23].

111 *2.1.1 Study sample*

112 The domestic violence module was intended to be administered on 2750 eligible women selected
113 from each household, but 63 respondents were not interviewed due to privacy concern. Out of
114 2687 women who were agreed and interviewed with domestic violence module, 24 women were
115 excluded in this study due to missing information on husband's or partner's education level and

116 occupation. So, a sample of 2663 (or $n = 2663$) women with their corresponding explanatory
117 variables were used for the purpose of our research.

118 *2.1.2 Variables in the Study*

119 The dependent or the outcome variable used for the present study was domestic violence, which
120 is defined as violence committed by intimate partner (husband or partner) against woman and
121 manifested through acts of physical, sexual and emotional violence. Violence perpetrated by the
122 current husband or partner was categorized as emotional spousal violence, by asking if her
123 husband or partner ever did the following: say or do something to humiliate you in front of
124 others; threaten to hurt or harm you or someone close to you; insult you or make you feel bad
125 about yourself. Physical spousal violence was measured by asking if her husband or partner ever
126 committed the following: push you, shake you, or throw something at you; slap you; twist your
127 arm or pull your hair; punch you with his/her fist or with something that could hurt you; kick
128 you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you
129 with a knife, gun, or any other weapon. Similarly, violence perpetrated by current husband or
130 partner was considered as sexual spousal violence, by questioning if her husband or partner did
131 the following: physically force you to have sexual intercourse with him even when you did not
132 want to; physically force you to perform any other sexual acts you did not want to; force you
133 with threats or in any other way to perform sexual acts you did not want to [23]. Finally, if the
134 response provided by the participant for any of acts listed under each categories of violence is
135 “yes”, it was coded as 1 (yes=1) and zero otherwise (no=0).

136 The outcome variable or domestic violence (Y) was also coded as 1 for women who were
137 experienced at least one form of spousal violence that is physical, sexual or emotional violence
138 and coded 0 for women who were not experience any form of spousal violence. Thus, the

139 outcome for the i^{th} woman is represented by a random variable Y_i ($i = 1, 2, \dots, n$) with two possible
 140 values coded as 1 (experienced domestic violence) and 0 (not experienced domestic violence).
 141 The explanatory variables which are included in this study were extracted from various literature
 142 reviews and assumed to be factors associated with domestic violence [17, 24 - 27].

143 2.2 Logistic Regression Analysis

144 Logistic regression analysis extends the techniques of multiple regression analysis to research
 145 situations in which the outcome variable is categorical but it is mathematically flexible and has
 146 less number of assumptions need to be met than linear regression model. Logistic regression
 147 analysis allows one to predict a discrete outcome, such as group membership, presence or
 148 absence, success or failure, from a set of explanatory variables and also it results in a clinically
 149 meaningful interpretation [28]. The response variable in our study is dichotomous. Therefore, in
 150 order to find out the net effect of the predictors on the response variable (domestic violence),
 151 logistic regression analysis method was adopted.

152 Logistic Regression analysis does not model the outcome variable Y directly, but rather
 153 the probabilities associated with the values of Y . Thus, the logistic model is defined as follows:

$$154 \quad p_i = p(Y_i | X) = \frac{e^{(\beta_0 + \beta_1 x_{i1} + \dots + \beta_p x_{ip})}}{1 + e^{\beta_0 + \beta_1 x_{i1} + \dots + \beta_p x_{ip}}} = \frac{e^{X_i^T \beta}}{1 + e^{X_i^T \beta}}$$

155 p_i = the probability that the i^{th} woman had experience on domestic violence with her given
 156 individual characteristics X_i .

157 Y_i = the response of the i^{th} woman (experienced domestic violence or not experienced).

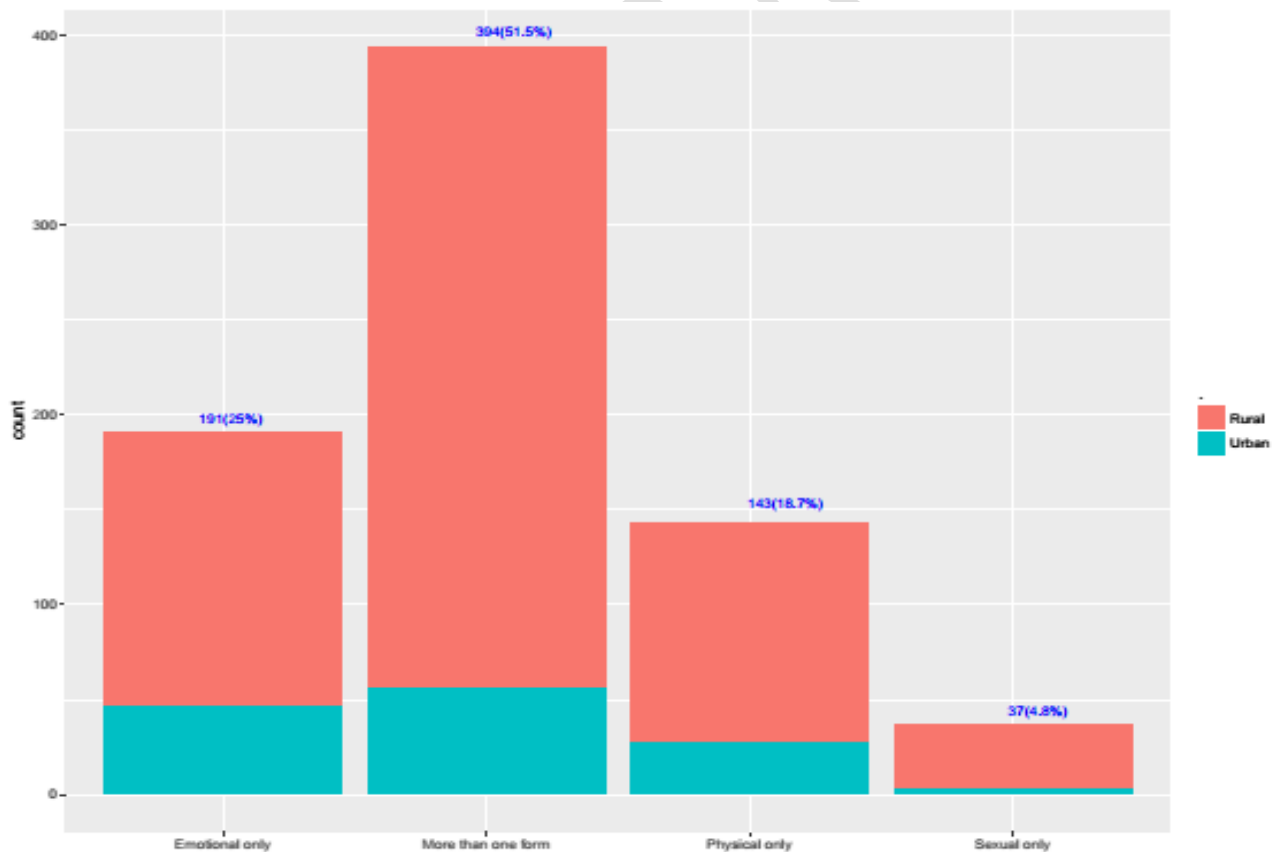
158 $X = n \times (p+1)$ matrix of p covariates with a column of 1s.

159 β is $(p+1) \times 1$ vector of unknown parameters.

160 3. RESULTS AND DISCUSSION

161 3.1 Univariate analysis

162 The descriptive analysis result on socio-economic and demographic characteristics of study
 163 participants, revealed that out of 2663 women involved in the study about 765(28.5%) were
 164 experienced domestic violence perpetrated by current husband or partner (Table 1). The
 165 prevalence of domestic violence had variation across age distribution of women, that is domestic
 166 violence was less prevalent (23.4%) among women age 15 to 24 than women age 25 to 34 and
 167 35 to 49 years old (Table 1). The proportion of domestic violence committed by intimate partner
 168 differs from place to place in Ethiopia. The result obtained from nine regions and two
 169 administrative cities showed that the percentage of domestic violence was highest in Oromia
 170 region (37.1%), Harari region (34.5%) and Gambela region (33.6%). On the contrary, the Somali
 171 region was where the lowest figure (7.7%) on domestic violence reported than other regions and
 172 city administrations in the country (Table 1).



173

174 **Fig.1.** Distribution of forms of domestic violence against women along place of residence in
 175 Ethiopia

176 A woman could experience one or more form of spousal violence, the study illustrated that
 177 191(25%) women were experienced emotional violence only, 143(18.7%) experienced physical
 178 violence only, 37(4.8%) experienced sexual violence only and about 394(51.5%) women were
 179 experienced more than one form of violence, that is emotional and physical or emotional and
 180 sexual or physical and sexual violence (**Fig.1**). The distribution of domestic violence according
 181 to women's place of residence indicated that 144(75%) emotional violence, 115(80.4%) physical
 182 violence and 34(94.9%) sexual violence victims were urban dwellers (**Fig.1**).

183 **Table 1.** Socio-demographic characteristics of sampled women and chi-square test between
 184 domestic violence experience and explanatory variables

Variable	Category	Experienced Domestic Violence		Chi-square (p-value)
		No	Yes	
Respondent's age	15-24	513(76.6)	157(23.4)	12.336 (0.002 [†])
	25-34	852(69.7)	370(30.3)	
	35 -49	533(69.1)	238(30.9)	
Marital status	Married	1878(71.4)	754(28.6)	0.699 (0.403)
	Living with partner	20(64.5)	11(35.5)	
Marital duration	0-9 years	801(74.9)	269(25.1)	12.379 (0.002 [†])
	10-19 years	737(69.7)	320(30.3)	
	20+ years	360(67.2)	176(32.8)	
Education Level	No education	1092(70.2)	463(29.8)	6.845 (0.077)
	Primary	546(70.8)	225(29.2)	
	Secondary	167(76.3)	52(23.7)	
	Higher	93(78.8)	25(21.2)	
Husband/Partner's education	No education	837(72.2)	322(27.8)	25.403 (0.000 [†])
	Primary	639(66.3)	325(33.7)	
	Secondary	230(76.7)	70(23.3)	
	Higher	192(80)	48(20)	
Respondent currently employed	Yes	614(69.4)	271(30.6)	2.323 (0.127)
	No	1284(72.2)	494(27.8)	
Husband/Partner currently employed	Yes	1772(71.3)	715(28.7)	0.009 (0.923)
	No	126(71.6)	50(28.4)	
Place of residence	Urban	442(76.6)	135(23.4)	10.221 (0.001 [†])
	Rural	1456(69.8)	630(30.2)	
Husband/partner drinks alcohol	Yes	389(57)	293(43)	90.733 (0.000 [†])
	No	1509(76.2)	472(23.8)	
Wealth index	Poorest	524(73.4)	190(26.6)	19.174 (0.001 [†])
	Poorer	325(68.9)	147(31.1)	
	Middle	272(65.1)	146(34.9)	
	Richer	270(68.9)	122(31.1)	
	Richest	507(76)	160(24)	
Religion	Orthodox	708(69.5)	311(30.5)	24.334 (0.000 [†])
	Catholic	8(57.1)	6(42.9)	
	Protestant	337(67.4)	163(32.6)	
	Muslin	828(75.5)	269(24.5)	
	Traditional	8(42.1)	11(57.9)	
	Other	9(64.3)	5(35.7)	

Region	Tigray	171(71.2)	69(28.8)	
	Afar	124(81.6)	28(18.4)	
	Amhara	262(70.2)	111(29.8)	
	Oromia	264(62.9)	156(37.1)	
	Somali	216(92.3)	18(7.7)	
	Benishangul	179(69.1)	80(30.9)	
	SNNPR	264(69.5)	116(30.5)	
	Gambela	97(66.4)	49(33.6)	80.491
	Harari	95(65.5)	50(34.5)	(0.000 [†])
	Addis Adaba	118(75.6)	38(24.4)	
Number of living children	Dire Dawa	108(68.4)	50(31.6)	
	None	204(81.3)	47(18.7)	
	1-2	631(70.6)	263(29.4)	
	3-4	537(70.8)	222(29.2)	14.014
Sex Composition living of Child	5+	526(69.3)	233(30.7)	(0.003 [†])
	No child	204(81.3)	47(18.7)	
	At least one son	1408(69.8)	609(30.2)	14.629
Age difference	Only daughter	286(72.4)	109(27.6)	(0.001 [†])
	wife is older	69(70.4)	29(29.6)	
	wife is same age	37(56.9)	28(43.1)	
	wife 1-4 years younger	569(72.8)	213(27.2)	7.504
	wife 5-9 years younger	787(71.4)	315(28.6)	(0.112)
	wife 10+ years younger	436(70.8)	180(29.2)	

185 † = Significant at 5% level of significance ($p < 0.05$)

186 3.2 Bi-variate analysis

187 Chi-square test was employed to identify the presence of relationship between domestic violence
 188 and the explanatory variables included in our study. The chi-square test result revealed that
 189 variables such as respondent's age, marital duration, husband/partner's education, place of
 190 residence, husband/partner alcohol consumption, wealth index, religion, region, number of
 191 living children and sex composition of child had statistically significant ($P < 0.05$) association
 192 with dependent variable or domestic violence. Conversely, variables like age difference between
 193 couples, marital status, women employment status, women education level and husband/Partner
 194 employment status had no statistically significant association with domestic violence ($P > 0.05$)
 195 (Table 1).

196 3.3 Multivariate analysis

197 Binary logistic model was applied to explore the net effect of socio-economic and demographic
198 factors on domestic violence against women committed by intimate partner (husband or partner).
199 The Hosmer-Lemeshow statistic depicts significance value of 0.569 which is greater than 0.05,
200 this implies that the model adequately fits the data (Table 2). Then, one can conclude that there is
201 no statistically significant difference between the observed number and the number predicted by
202 the logistic regression model adopted in our study [28]. All the explanatory variables involved in
203 the analysis were categorical. As a result, the last category of the variables was taken as
204 reference category to interpret the findings of our analysis. In our analysis five predictor
205 variables were statistically significant ($P < 0.05$), where at least one of their categories could
206 negatively or positively influence domestic violence against women (Table 2). The significant
207 predictors suggested by the model are husband's or partner's education level, sex composition of
208 living child, husband's/partner's alcohol consumption, wealth index and region (Table 2).

209 Our analysis indicated that the odds of experiencing domestic violence were 1.603 times
210 higher among women whose husbands or partners were in primary education than women whose
211 husbands or partners were at higher level of education. This suggests that as level of Education
212 for husband or partner increases the probability of committing violence against wife or partner
213 decreases. The sex composition of children in a family was significant predictor in our study;
214 women who had no child 0.634 times less likely to be exposed for domestic violence perpetrated
215 by husband or partner compare to women who had daughter/s only in the household. Regarding
216 alcohol consumption, the study discovered that the odds of experiencing domestic violence for
217 women whose husbands or partners drink alcohol were 2.861 times higher than their

218 counterparts. Wealth index is another variable found to be a risk factor for domestic violence.
219 The study pointed out that, the likelihood of experiencing domestic among women who live in
220 poorest and middle income households were 1.53 and 1.609 times higher compare to richest
221 households, respectively. Similarly, region was also identified as a risk factor for domestic
222 violence, where women who live Tigray, Afar, Amhar, Oromia Somali, Benishangul, Southern
223 Nations Nationalities People Region (SNNPR) and Gambela regions were 0.490, 0.425, 0.427,
224 0.968, 0.162, 0.630, 0.670, 0.799 times less likely to endure domestic violence than women who
225 live in Dire Dawa city administration, respectively (Table 2).

226

227

228 **Table 2.** Maximum likelihood estimates of the logistic regression model with significant
 229 variables in the final model.

Variables	Categories	$\hat{\beta}$	$S.E(\hat{\beta})$	Wald	Df	P-value	Exp($\hat{\beta}$)	95% C.I. for Exp($\hat{\beta}$)	
								Lower	Upper
Husband's/ Partner's education	No education	0.283	0.206	1.895	1	0.169	1.327	0.887	1.987
	Primary	0.472 [†]	0.197	5.723	1	0.017	1.603	1.089	2.360
	Secondary	-0.009	0.222	0.002	1	0.968	0.991	0.642	1.530
	Higher (Ref)								
Sex composition living of child	No child	-0.455 [†]	0.206	4.901	1	0.027	0.634	0.424	0.949
	At least a son	0.129	0.128	1.011	1	0.315	1.138	0.885	1.463
	Only daug. (Ref)								
Husband/ partner drinks alcohol	Yes	1.051	0.110	91.21	1	0.000	2.861	2.306	3.550
	No (Ref)								
Wealth index	Poorest	0.425 [†]	0.163	6.832	1	0.009	1.530	1.112	2.104
	Poorer	0.284	0.166	2.940	1	0.086	1.329	0.960	1.840
	Middle	0.476 [†]	0.169	7.941	1	0.005	1.609	1.156	2.241
	Richer	0.250	0.172	2.101	1	0.147	1.284	0.916	1.800
	Richest (Ref)								
Region	Tigray	-0.714 [†]	0.236	9.119	1	0.003	0.490	0.308	0.778
	Afar	-0.856 [†]	0.285	9.051	1	0.003	0.425	0.243	0.742
	Amhara	-0.850 [†]	0.230	13.70	1	0.000	0.427	0.273	0.670
	Oromia	-0.033	0.210	0.024	1	0.876	0.968	0.642	1.460
	Somali	-1.820 [†]	0.311	34.23	1	0.000	0.162	0.088	0.298
	Benishangul	-0.461 [†]	0.231	3.978	1	0.046	0.630	0.401	0.992
	SNNPR	-0.400	0.218	3.379	1	0.066	0.670	0.437	1.027
	Gambela	-0.225	0.258	0.756	1	0.384	0.799	0.482	1.325
	Harari	0.234	0.251	0.868	1	0.352	1.263	0.773	2.066
	Addis Adaba	-0.427	0.271	2.480	1	0.115	0.652	0.383	1.110
	Dire Dawa (Ref)								
Hosmer and Lemeshow test						Chi-square	Df	Sig.	
						6.705	8	0.569	

230 Ref = Reference category, [†] = Significant at 5% level of significance (p< 0.05)

231

232

233

234

235

236 In our study EDHS 2016 data was used to explore the potential risk factors associated with
237 domestic violence against women who were currently married or living with someone in
238 Ethiopia. As our analysis result reveals 28.5% (765) of women responded that they were victims
239 of one or more forms of violence perpetrated by husband or partner at some point in their lives.
240 This result is in line with previous study which mentioned that prevalence of domestic violence
241 against women by husband or intimate partner in Ethiopia ranges from 20 to 78 % [29].

242 The findings of the study showed that as husband's or partner's education level increases the
243 likelihood of committing domestic against intimate partner decreases. This result is in agreement
244 with previous studies by [30,31,25], which stated that the higher the educational level of husband
245 or partner, the lower a woman's risk of ever experiencing domestic violence. The effect of
246 gender composition of children in a family was identified as statistically significant factor for
247 domestic violence in our study, in which women with no child were less probable to encounter
248 domestic violence perpetrated by intimate partner than women who had only daughter/s. Though,
249 this result contradicts study conducted in Nepal [26], where the odds of experiencing domestic
250 violence among childless women were two times higher than women with children.

251 Another core factor for domestic violence was revealed to be alcohol consumption, the
252 odds of domestic violence was higher among women whose husbands or partners drink alcohol
253 than women whose husband or partner do not. This result is consistent with various studies,
254 which confirmed that alcohol consumption increases propensity of husband's or partner's to
255 commit violent act against intimate partner [24, 25, 32]. Moreover, our study illustrated that the
256 lower the household in wealth strata the higher would be the risk of experiencing domestic
257 violence. This result concur with studies conducted in all 28 Member States of European Union
258 and India, where women who found it difficult to live on their household income were highly

259 likely to experience physical and/or sexual violence from an intimate partner than women who
260 found their level of household income to be comfortable [15,30].

261 On the other hand, the formation of regions in Ethiopia was based on ethnicity, where each
262 ethnic group has its own cultural and traditional practices. This study also showed that domestic
263 violence varies across regions of the country; this finding is in line with other studies which
264 indicated that domestic violence could vary due to diversity in culture and tradition across
265 regions [33, 29, 34, 30]

266 **4. CONCLUSION**

267 The prevalence of domestic violence had variation along with socioeconomic and demographic
268 variables in our study. Husband's or partner's education level, sex composition of living child,
269 alcohol consumption, wealth index and region had statistically significant effect on domestic
270 violence against women. The results of our investigation have depicted that higher education
271 level and better economic status as protective factors against domestic violence. Thus, enhancing
272 access to better education, encouraging school completion, and unwavering support to improve
273 the economic status of women should be prime issues in Ethiopia. Likewise, the study also
274 highlighted the need to focus on specific regions in tackling domestic violence against women
275 and changing gender related attitudes in the country.

276

277

278 **REFERENCES**

- 279 1. United Nations (UN). The World's Women 2015: Trends and Statistics. United Nations,
280 Department of Economic and Social Affairs, Statistics Division, New York.
- 281 2. United Nations (UN) Department of Public Information. "UNiTE to End Violence
282 against Women" DPI/2546A. 2011. website at: <http://endviolence.un.org>.
- 283 3. European Union (EU) Campaign against Violence, 2000. Women's Aid. Website,
284 http://www.euowrc.org/13.institutions/1.ec/ec-en/01.ec_en.htm)
- 285 4. Levy B. Women and violence. Berkeley, CA: Seal Press. 2008.

- 286 5. Ellsberg M, Heise L. *Researching Violence Against Women: A Practical Guide for*
287 *Researchers and Activists*. World Health Organization, PATH, Washington DC, United
288 States.2005.
- 289 6. Council of Europe. *Convention on preventing and combating violence against women*
290 *and domestic violence*. 2011; CETS No. 210, p. 8.
- 291 7. Cook R, Dickens B, Fathalla M. *Reproductive health and human rights: integrating*
292 *medicine, ethics, and law*, Oxford University Press Inc, New York. 2008.
- 293 8. Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C. *Intimate partner violence*
294 *and women's physical and mental health in the WHO multi-country study on women's*
295 *health and domestic violence: an observational study*.2008; *Lancet* 371 , 1165–1172
- 296 9. United Nations (UN). *The Economic Costs of Violence Against Women: An Evaluation*
297 *of the Literature*.2005; p. 7.
- 298 10. Heise L, Ellsberg M, Gottemoeller M. *Ending Violence Against Women*. Baltimore:
299 John's Hopkins University School of Public Health, Population Information
300 Program.1999; Report No. Series L, No. 11.
- 301 11. United Nations (UN) Secretary General's database. *Violence against women* available
302 online at: <http://www.un.org/esa/vawdatabase>. accessed 18 April 2009
- 303 12. United Nations (UN). *Ending Violence against Women: from words to action, Study of*
304 *the Secretary-General (A/61/122/Add.1 and Corr.1)*, inter alia. 2006. pp. 96-97
- 305 13. United Nations Children's Fund (UNICEF). *Innocenti Research Centre Piazza SS.*
306 *Annunziata, 1250122 Florence, Italy*.2000. www.unicef-icdc.org.
- 307 14. World Health Organization (WHO). *Global and regional estimates of violence against*
308 *women: prevalence and health effects of intimate partner violence and non-partner sexual*
309 *violence*. 2013.
- 310 15. European Union (EU) Agency for Fundamental Rights. *Violence against women: an EU-*
311 *wide survey*, Luxembourg: Publications Office of the European Union.2014. ISBN 978-
312 92-9239-342-7 doi:10.2811/62230
- 313 16. Andersson N, Ho-Foster A, Mitchell S, Scheepers E, Goldstein S. *Risk factors for*
314 *domestic physical violence: national cross-sectional household surveys in eight southern*
315 *African countries*. *BMC Women's Health*. 2007; 7, 1-11.
- 316 17. García-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts C. *WHO multi- country study*
317 *on women's health and domestic violence against women: initial results on prevalence,*
318 *health outcomes and women's responses*. World Health Organization, Geneva.2005.
- 319 18. Bhatta DN. *Shadow of domestic violence and extramarital sex cohesive with spousal*
320 *communication among males in Nepal*. *Reprod Health*.2014; 11, 1 - 44.
- 321 19. *Constitution of the Federal Democratic Republic of Ethiopia*. Proclamation No. 1/1995,
322 *Federal Negarit Gazeta - No.1*.1995.
- 323 20. United Nations (UN) Women. *Shelters for Women and Girls Who Are Survivors of*
324 *Violence in Ethiopia*. Addis Ababa, Ethiopia.2016.
- 325 21. Kedir A, Admasachew L. *Violence against women in Ethiopia*. *Gender, Place and*
326 *Culture*. 2010; 17, 437-452.
- 327 22. World Health Organization (WHO). *Multi-country Study on Women's Health and*
328 *Domestic Violence against Women, Ethiopia*. 2005.
- 329 23. Central Statistical Agency (CSA)/Ethiopia and ICF. *Ethiopia Demographic and Health*
330 *Survey 2016-Final Report*. Addis Ababa, Ethiopia, and Rockville, Maryland, USA.

- 331 24. Feseha G, G/mariam A, Gerbaba, M. Intimate partner physical violence among women
332 in Shimelba refugee camp, northern Ethiopia. *BMC Public Health* 2012 12:125.
- 333 25. Adjah OE, Agbemafle, I. Determinants of domestic violence against women in Ghana
334 *BMC Public Health*. 2016; 16-368, DOI 10.1186/s12889-016-3041-x
- 335 26. Puri M, Frost M, Tamang J, Lamichhane P, Shah I. The prevalence and determinants of
336 sexual violence against young married women by husbands in rural Nepal. *BMC Research*
337 *Notes*. 2012; 5-291. doi:10.1186/1756-0500-5-291.
- 338 27. Johnston HB, Naved RT. Spousal violence in Bangladesh: a call for a public health
339 response. *J Health Popul Nutr*. 2008; 26, 3-366.
- 340 28. Hosmer DW, Lemeshow S. *Applied Logistic Regression*, 2nd ed., John Wiley and Sons,
341 New York. 2000.
- 342 29. Semahegn A, Mengistie B. Domestic violence against women and associated factors in
343 Ethiopia; systematic review *Reproductive Health*. 2015; 12-78 DOI 10.1186/s12978-015
344 007.
- 345 30. Priya N, Abhishek G, Ravi V, Aarushi K, Nizamuddin K, Dhanashri B, Shobhana B,
346 Sanjay K. "Study on Masculinity, Intimate Partner Violence and Son Preference in
347 India". International Center for Research on Women, New Delhi. 2014.
- 348 31. European Commission. *Violence Against Women and Economic Independence*.
349 Luxembourg: Publications Office of the European Union. 2017. ISBN 978-92-79-65779-
350 5 doi: 10.2838/394400
- 351 32. World Health Organization (WHO). *Violence against women*, Fact sheet No. 239. 2016.
- 352 33. Shanko W, Wolday M, Assefa, N, Aro AR. Domestic violence against women in Kersa,
353 Oromia region, eastern Ethiopia. *East Mediterr Health J*. 2013; 19, 18-23.
- 354 34. Benebo OF, Schumann B, Vaezghasemi M. Intimate partner violence against women in
355 Nigeria: a multilevel study investigating the effect of women's status and community
356 norms, *BMC Women's Health*. 2018. <https://doi.org/10.1186/s12905-018-0628-7>.

357

358

359

360

361

362

363