## ORIGINAL RESEARCH

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# Intimate partner violence and its associated factors among married women at Jeldu district, Central Ethiopia: A community-based mixed cross-sectional study

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### Abstract

**Background and Aims:** Intimate partner violence is a global threat, regardless of any religious, cultural, or economic differences. Few studies have been conducted before in rural areas of Ethiopia. Therefore, this study aimed to assess the prevalence and associated factors of intimate partner violence among married women in Jeldu district.

**Methods:** A community-based mixed cross-sectional study was conducted among 620 married women in Jeldu district, west Ethiopia. A systematic random sampling technique was employed to select study participants. The quantitative data were checked and entered into Epidata and STATA version 15.0 for analysis. Univariate and multivariate logistic regression was used to identify the associated factors of intimate partner violence. The finding of the quantitative study was triangulated with the findings of focused group discussion.

**Results:** Six hundred seven married women participated in the study making a response rate of 97.43%. The lifetime and past 12 months prevalence of intimate partner violence was 57.7% (95% confidence interval [CI]: 53.78%–61.62%) and 53.20% (95% CI: 49.28%–57.12%) respectively. Partner with lower education (adjusted odd ratio [AOR] = 3.64 (95% CI: 1.07-12.38), alcohol intake by partner (AOR = 1.92, 95% CI: 1.31-2.81), equal dominance on family affairs (AOR = 0.30, 95% CI: 0.18–0.51), and family size >5 (AOR = 4.54, 95% CI: 1.89-10.91) were factors significantly associated with intimate partner violence.

**Conclusion:** The prevalence of intimate partner violence was relatively higher among married women study area. Partner's lower educational status, alcohol intake of the partner, dominance on family issues, and family size were factors associated with intimate partner violence. So, gender offices, and district and regional educational sectors should design appropriate strategies and work hard to tackle the problem.

### KEYWORDS

associated factors, Ethiopia, intimate partner violence, women

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## 1 | INTRODUCTION

Intimate partner violence (IPV) refers to any behavior within an intimate relationship that causes physical, psychological, sexual, controlling, and economic violence against a partner in the relationship.<sup>1</sup> It takes different forms and manifestations, which include: physical abuse (kicking, knocking, confinement, and choking), sexual abuse (marital rape, sexual assault, harassment, or exploitation), spiritual abuse, economic abuse, and emotional or psychological abuse.<sup>2,3</sup> Globally, about one-third of women who are in a relationship have experienced violence by their close partner.<sup>4,5</sup> The highest rate of which is reported in Peru, Bangladesh, and Ethiopia.<sup>3</sup> Many women in Africa were subjected to lifetime partner and ex-partner violence than women everywhere in the world.<sup>6</sup> The Ethiopian Demographic and Health Survey (EDHS) of 2016 report indicates that physical and psychological violence was experienced by 24% each and sexual violence by 10% of married women.<sup>7</sup> In addition, in Hossana town, Ethiopia, the overall prevalence of IPV among married women was 58.8%.8

Globally, about 38% of all murders of women were committed by intimate partners.<sup>8,9</sup> In addition, IPV among married women of childbearing age could notably enhance their risk of injury, disability, depression, and anxiety.<sup>10</sup> It also leads to unplanned and unwanted pregnancy, unsafe abortion, preterm delivery, stillbirth, hypertension, sexually transmitted infections including HIV, pregnancy complications, pelvic inflammatory disease, urinary tract infections, sexual dysfunction, physical, and mental injury, and death.<sup>10–12</sup> In addition, these women might also experience isolation, inability to work, income loss, lack of participation in regular activities, and limited ability to care for themselves and their children.<sup>6,13,14</sup> Furthermore, women who were exposed to IPV were found to initiate Antenatal care (ANC) late as compared to those who don't have the history<sup>15</sup> and IPV was associated with post-partum depression.<sup>16</sup>

The 2030 agenda for sustainable development goal target 5.2 was set to "eliminate all forms of violence against all women and girls in public and private spheres."<sup>17</sup> In addition, in response to the high prevalence of Intimate partner violence against women (IPVAW), the government of Ethiopia has incorporated women's rights and gender equality in the constitution (Art-35 and 89), criminal code No 414/2004 (Art 564) and Family Code Proclamation No 213/2000. Furthermore, the last Growth and Transformational Plan (GTP II 2015) included ending violence against women as a priority.<sup>18</sup>

In Ethiopia and other Sub-Saharan African (SSA) countries, rigid gender roles enable the controlling and violent behavior of husbands.<sup>19</sup> In addition, partners who use substances have experienced fighting habits with other people, and the low wealth index of households was significantly associated with IPV.<sup>8</sup> Despite the international emphasis on reducing IPV against women, the prevalence of IPV was high in Ethiopia.<sup>20,21</sup> Furthermore, as the finding of previous studies indicates the likelihood of IPV among married women was high in rural areas as compared to the urban areas in SSA countries,<sup>22</sup> including Ethiopia.<sup>3,23-25</sup>

Few studies have been conducted before especially in rural areas of Ethiopia and previous studies did not consider the qualitative study which could help to understand community attitudes toward IPV and the experience of women with IPV. Therefore, this study aimed to assess the prevalence and associated factors of IPV among married women in one rural area of Ethiopia.

## 2 | METHODS

### 2.1 | Study design, period, and area

A community-based mixed cross-sectional study was conducted from August 10/2021 to September 10/2021 in the Jeldu district, Oromia regional state, Ethiopia. Jeldu district is located 112 km to the west of Addis Ababa (capital city of Ethiopia). The district has 1 primary hospital, 6 health centers, and 30 health posts. The district has 29 kebeles (the lowest administrative unit in Ethiopia).

### 2.2 | Population

All married women who were residents of the Jeldu district in 2021 constituted the source population. The study population was all selected married women in the district during the study period.

### 2.3 | Inclusion and exclusion criteria

Those who were married, who had an intimate partner during the study period, and who resided in the district for at least 1 year were included in the study. Women who were unable to give necessary information due to critical illness were excluded.

# 2.4 | Sample size determination and sampling procedure

For the quantitative study, the sample size was determined using a single population proportion formula considering the following assumptions: 95% confidence interval ( $Z \alpha/2 = 1.96$ ), 5% margin of error (*d*), 42.19% prevalence (*p*) of the problem,<sup>25</sup> and a 1.5 design effect;

$$n = \frac{(z_{a/2})^2 pq}{d^2}, \quad n = \frac{(1.96)^2 (0.4219)(0.5781)}{0.05^2}$$

The final sample size was 620 after adding 10% for the nonresponse rate. From 29 kebeles in the district, 9 kebeles (1 urban and 8 rural) were selected using simple random sampling. Then, a systematic random sampling technique was employed using the family folder identification number of households that present at a health post in each selected kebele. The sample size was proportionally allocated for the selected kebele, and then the k-interval was

calculated by dividing the total household in each kebele by the allocated sample size. The first household was selected by lottery method. When there were no married women in the selected household, the next household was selected. Where there was more than one eligible respondent in a sampled household one was selected using a lottery method.

For the qualitative study, two focus group discussions (FGD) each having 8 participants were conducted. One FGD was from a housewife and the other was from married government employers. The number of FGDs was determined based on the saturation of information and variation of the population. FGD participants were selected using purposive sampling techniques from married women in the area. The FGDs were categorized by area of residence and employment status to capture heterogeneity among the two groups and to allow for homogeneity within a group.

## 2.5 | Data collection tools and procedure

Quantitative data were collected through face-to-face interviews using a questionnaire that was adapted from the WHO multicountry study on women's health and life experiences questionnaire.<sup>26</sup> The questionnaire consists of the socio-demographic data of the respondents and their husbands/partners, factors affecting IPV, and various types of IPV variables. It was translated into the regional language (Afan Oromo) by language experts and translated back to English by another person to ensure consistency. Nine health extension workers were recruited for quantitative data collection and the procedure was supervised by two health officers. The data was collected at a convenient place for the respondents individually. Their partners have not participated in the interview to keep confidentiality and allow the women to freely explain the violence and to minimize conflict with their partners. When, the woman was with her spouse, neighbor, or relative, the data collection was postponed for the next day to keep the confidentiality of the information.

For the qualitative data, FGD was conducted to explore how married women experienced IPV, causes, community acceptance, gender roles, and women's reactions to the problem were discussed using regional language (Afan Oromo) until saturation was reached. An open-ended unstructured discussion guide was used to collect the data; handwritten notes were taken at the time of the discussion by two female nurses.

# 2.6 Study variables

The dependent variable was intimate partner violence (IPV). Socio-demographic characteristics (age, education, occupation, ethnicity, religion, type of marriage, family size, husband education, husband's age, husband occupation), place of residence, and the husband's alcohol use and behavior (aggressiveness), social acceptance of violence against women, male dominance in family affairs (Gender roles), monthly income, decision-making power and economic status of married women, and experience of IPV were independent variables.

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### 2.7 | Operational definition

*Physical violence* was presumed to have taken place when a woman provided "Yes" answers to any of the five questions that inquired her whether she was; slapped/thrown at something that could hurt, hit with a fist or something else, kicked/beaten, choked or burned on purpose and threatened to use/using a gun, knife or any other weapon against her<sup>27</sup>

*Sexual violence* was assumed to have taken place when a woman provided "Yes" answers to any of the three questions, was physically forced to have sexual intercourse against her will, had 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.<sup>27</sup>

*Psychological violence*: Women who reported that they experienced one or more acts of being insulted or made to feel bad about one-self, humiliated or belittled in front of others, or threatened to hurt her or someone she care about.<sup>27</sup>

*Lifetime IPV*: women who disclosed the experience of having one or more acts of physical, psychological, or sexual violence by a current or former partner at any point in time.<sup>25</sup>

## 2.8 | Data quality management

A questionnaire was translated to Afan Oromo (regional language) and pre-tested on 5% (31) of married women in one kebele in the study area which was not included in the study and far from the selected kebeles and modified as necessary. Data collectors and supervisors were trained for 1 day on the study instrument, consent form, how to interview, data collection procedure, and confidentiality of the respondents. The collected data were checked for completeness daily by the supervisors and the investigators to monitor the overall quality of the data collection process.

### 2.9 | Data processing and analysis

After checking for the completeness and missing value of the quantitative data questionnaire was coded and entered into Epidata version 3.1 and exported to STATA version 15.0 for analysis. The descriptive statistics of frequency distribution, percentage, and measure of central tendency were done. univariate and multivariate regression was done to identify factors associated with IPV. In the univariate regression analysis, variables with a *p*-value < 0.25 were made candidates for multivariate logistic regression. In multivariate logistic regression, an adjusted odds ratio (AOR) with a 95% confidence interval was computed to identify the strength of association with respective *p*-value < 0.05 declaring the presence of a significant association. Qualitative data from focus group

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discussions were analyzed manually by thematic analysis technique descriptively. The finding of both types of data was triangulated.

## 2.10 | Ethical consideration

Ethical clearance for the study was approved by the Research and Ethical Review Committee of the College of Medicine and Health Science of Ambo University. Hierarchically all administrative bodies were communicated and permission was secured by written letter. Verbal informed consent was obtained from the study participants. The privacy and confidentiality of study participants were kept by not taking their names and other identifiers, the data were collected in the absence of their husbands and neighbors.

# 3.1 | Socio-demographic characteristics of the women and their partners

A total of 607 married women participated in the study making a response rate of 97.43%. The mean age of the respondents was 30.90 ( $\pm$ 9.997 SD) years. Nearly all (97.2%) of the study participants were Oromo by ethnicity, and half of them were uneducated. About 41.7%, 40.4%, and 17.6% of them were protestant, orthodox, and Wakefata religious followers respectively. The majority (89.3%) of the women accomplished their marriage by arranged marriage type and more than half (53.4%) of them were housewives by occupation (Table 1).

The mean age of their partner was 35.62 (±10.049 SD) years. Nearly all (97.7%) of the study participants' partners were Oromo

Variables	Characteristics	Live time IPV		Total	$P_{0,2}$
Age of respondents (vears)	16-25	144 (68 6)	66 (31 <i>A</i> )	210	
	26 40	140 (55 2)	120 (44.9)	210	0.000
	41 50	20 (29 0)	130 (44.0)	270	
	41-50	30 (37.0)	47 (01.0)	20	
Filestein.	250	18 (53.3)	14 (40.7)	50	0.507
Ethnicity	Oromo	339 (57.5)	251 (42.5)	590	0.507
	Amhara	6 (60.0)	4 (40.0)	10	
	Gurage	3 (100)	0 (100)	3	
	Tigre	2 (50.0)	2 (50)	4	
Educational status	Uneducated	148 (48.4)	158 (51.6)	306	0.000
	Elementary	160 (66.9)	79 (33.1)	239	
	High school	34 (65.4)	18 (34.6)	52	
	College and above	8 (80.0)	2 (20.0)	10	
Religion	Protestant	143 (56.5)	110 (43.5)	253	0.958
	Orthodox	144 (58.8)	101 (41.2)	245	
	Wakefata	62 (57.9)	45 (42.1)	107	
	Muslim	1 (50)	1 (50)	2	
Occupation	Housewife	171 (52.8)	153 (47.2)	324	0.148
	Government employee	13 (68.4)	6 (31.6)	19	
	NGO employee	1 (50.0)	1 (50.0)	2	
	Student	5 (62.5)	3 (37.5)	8	
	Merchant	16 (53.3)	14 (46.7)	30	
	Daily laborer	15 (75.0)	5 (25.0)	20	
	Farmer	129 (63.2)	75 (36.8)	204	
Types of marriage	Arranged	306 (56.4)	237 (43.6)	543	0.086
	Love	33 (73.3)	12 (26.7)	45	
	Forced	11 (57.9)	8 (42.1)	19	

TABLE 1 Sociodemographic characteristics of married women in Jeldu district (N = 607).

Abbreviation: IPV, intimate partner violence.

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and nearly half (48.1%) of them had attended elementary education. One-fifth of respondents had more than five family sizes and 53.4% had an average monthly income  $\leq$ 1000 Ethiopian Birr (ETB) (Table 2).

# 3.2 | Partners' behavior

In this study, 62.9% of respondent's partners had a history of alcohol drinking and almost one-fifth (18.6%) of them were aggressive. In

addition, 72.2% of respondents' family affair was dominated by their partners only.

# 3.3 | Prevalence of IPV

The lifetime and the past 12 months prevalence of IPV among married women in the study area was 57.7% (95% confidence interval [CI]: 53.78%-61.62%) and 53.2% (95% CI: 49.28%-57.12%) respectively. In addition, 45.8%, 50.6%, and 38.1%

TABLE 2 Socio-demographic characteristics of respond	lents' partners in Jeldu district ( $N = 607$ ).
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Variables	Characteristics	Live time IPV Yes (%)	No. (%)	Total	Pearson $\chi^2$
Age of respondents (years)	18-30	157 (70.1)	67 (29.9)	224	0.000
	31-45	146 (51.6)	137 (48.4)	283	
	45-55	33 (47.8)	36 (52.2)	69	
	>50	14 (45.2)	17 (54.8)	31	
Ethnicity	Oromo	343 (57.8)	250 (42.2)	593	0.407
	Amhara	3 (37.5)	5 (62.5)	8	
	Gurage	2 (100)	0 (0.0)	2	
	Tigre	2 (50.0)	2 (50.0)	4	
Husband educational status	Uneducated	96 (48.7)	101 (51.3)	197	0.006
	Elementary	180 (61.6)	112 (38.4)	292	
	High school	54 (58.7)	38 (41.3)	92	
	College and above	20 (76.9)	6 (23.1)	26	
Religion	Protestant	122 (56.2)	95 (43.8)	217	0.761
	Orthodox	144 (58.1)	104 (41.9)	248	
	Wakefata	83 (59.7)	56 (40.3)	139	
	Muslim	1 (33.3)	2 (66.7)	3	
Husband occupation	Government employee	25 (59.5)	17 (40.5)	42	0.262
	NGO employee	0 (0.0)	3 (100.0)	3	
	Student	4 (50.0)	4 (50.0)	8	
	Merchant	25 (58.1)	18 (41.9)	43	
	Daily laborer	19 (73.1)	7 (26.9)	26	
	Farmer	276 (57.0)	208 (43.0)	484	
	Others	1 (100.0)	0 (0.0)	1	
Family size	≤2	112 (69.6)	49 (30.4)	161	0.000
	3-5	187 (60.1)	124 (39.9)	311	
	>5	51 (37.8)	84 (62.2)	135	
Monthly income	≤1000	184 (56.8)	140 (43.2)	324	0.512
	1001-3000	137 (57.3)	102 (42.7)	239	
	>3000	29 (65.9)	15 (34.1)	44	

Abbreviation: IPV, intimate partner violence.

**TABLE 3** Type of violence experienced by married women in Jeldu district (*n* = 607).

Type of violence	Characteristics	Yes (%)	No (%)
Physical violence	Slapping	217 (35.7)	390 (64.3)
	Chocked or burned on purpose	167 (27.5)	440 (72.5)
	Kicked-up (bitten)	86 (14.2)	521 (85.8)
	Threaten by gun, knife, or weapon	94 (15.5)	513 (84.5)
	Hit by a fist or something else	71 (11.7)	536 (88.3)
Psychological violence	Insulted in front of others	249 (41.0)	358 (59)
	Humiliated in front of others	202 (33.3)	405 (66.7)
	Threaten	117 (19.3)	490 (80.7)
Sexual violence	Forced to have sexual intercourse	191 (31.5)	416 (68.5)
	Had sexual intercourse with fear	148 (24.4)	459 (75.6)
	Had sexual intercourse that humiliated her	67 (11.0)	540 (89)

experienced physical, psychological, and sexual violence respectively in their lifetime; and 34.3% and 23.6% experienced emotional, physical, and sexual violence in the past 12 months respectively.

## 3.4 | Type of IPV violence experienced by women

Slapping was the most common form of physical violence which was 35.7% and more than one-fourth (27.5%) were choked or burnt on purpose. In addition, about 15.5% were threatened by a gun, knife, or other weapon by their intimate partner in their lifetime (Table 3). On the other hand, the common form of psychological violence among married women in Jeldu district was being insulted in front of others (41%). In addition, 19.30% reported that they were threatened by their intimate partner (Table 3).

Among women who reported sexual violence, one-third (31.5%) stated that they were forced to have sexual intercourse while they were not ready to do so, and 11% were forced to have sexual intercourse that degraded or humiliated them (Table 3).

### 3.5 | Factors associated with IPV

Bivariable logistic regression analysis showed that respondents' age, education, occupation, type of marriage and partners/husband's age,

education, alcohol consumption, aggressiveness and dominance in family affairs, and family size were candidates for the final model. However, in multivariable logistic regression, alcohol intake by partner (AOR = 1.92, 95% CI: 1.31–2.81), partner educational status (AOR = 3.64, 95% CI: 1.07–12.38), equal dominance on family affairs (AOR = 0.30, 95% CI: 0.18–0.51), and family size (AOR = 4.54, 95% CI: 1.89–10.91) were factors significantly associated with IPV at *p*-value < 0.05 (Table 4).

Similarly, as raised by FGD discussants low income, poor educational status, infertility, substance use of partners, and cultural acceptability of wife beating were the causes for IPV. A 35-year-old woman stated, ".... my intimate partner beat me many times when he was drinking... he aggressively started to insult me and later he beat me." A 29-year-old woman (Woman League) said "...Intimate partner violence was because of poor educational status of women; if they were not educated, they were bound to be in the hands of men; they were dependent..."

Consistently, from the two FGDs, different attitudes were raised against IPV; the community accepts IPV if the woman commits extramarital sex, is in dispute with her neighbors, and fails to give birth. A 36-year-old woman reported that there was a saying, "A stick can't kill a women but it corrects her." Contrary to the above opinion, the other attitude raised by FGD was the community couldn't accept IPV since women are part of society. A 33-year-old woman states "Despite the traditional roles of men as head of the family, the community considers women as daughter, sister, wife, and mother. So, I do not accept partner attack under any circumstances."

Additionally, most of the FGD discussants reported that gender role has a great influence on IPV. A 32-year-old woman states: "In my neighborhood last month, the husband beat his wife and she left her house and went to her parents; After three days when she returned to her house, the husband gathered every agricultural product to his relative house and some products were sold. So due to this, she decided not to leave her house again rather she chose to tolerate and hide the challenges she faced from her partner."

A 31-year-old woman reported "My husband perceives that I am born to serve him all the time. He was the head of the household. He was the decision maker for everything in the household."

# 4 | DISCUSSION

This study aimed to assess the prevalence and associated factors of IPV among married women living in Jeldu district, West Ethiopia. It was identified that the prevalence of IPV in the study area was 57.7% which was consistent with a study conducted in Hosanna, southern Ethiopia, Gondar referral hospital, and Southeast Nigeria.<sup>2,27,28</sup> However, this finding is higher than those of studies conducted in Abay Chomen, St.paulos millennium medical college hospital and Shire Endasilasie, Wondo-Genet district, southern Ethiopia, Debre Markos town in Ethiopia, Kersa District, Ethiopia, Aksum Town, Ofla District in Ethiopia.<sup>8,11,12,27,29-32</sup> This difference might be due to differences in the study setting, that is, the studies conducted at St.

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		Lifetime IPV		Odds ratio			
Variable	Characteristics	Yes	No	Crude (95% CI)	Adjusted (95% CI)	p Value	
Respondents' age	16-25	144	66	0.52 (0.24, 1.14) <sup>a</sup>	0.47 (0.03, 8.90)	0.616	
	26-40	160	130	0.93 (0.44, 1.97)	0.35 (0.02, 5.93)	0.465	
	41-50	30	47	1.79 (0.76, 4.19)	3.95 (0.75, 20.75)	0.104	
	>50	16	14	1	1		
Respondents'	Uneducated	148	158	4.27 (0.89, 20.44) <sup>a</sup>	2.04 (0.24, 17.78)	0.517	
educational status	Elementary	160	79	1.98 (0.41, 9.52)	1.40 (0.16, 12.22)	0.762	
	High school	34	18	2.12 (0.41, 11.04)	1.12 (0.13, 9.84)	0.919	
	College and above	8	2	1	1		
Respondent's	Farmer	129	75	1	1		
occupation	Housewife	171	153	1.54 (1.08, 2.20) <sup>a</sup>	0.89 (0.57, 1.39)	0.610	
	Gov't employee	13	6	0.79 (0.29, 2.18)	0.82 (0.21, 3.26)	0.777	
	NGO employee	1	1	1.72 (0.11, 27.90)	0.13 (0.01, 2.85)	0.195	
	Student	5	3	1.03 (0.24, 4.44)	0.65 (0.13, 3.25	0.600	
	Merchant	16	14	1.51 (0.70, 3.26)	1.43 (0.60, 3.38)	0.420	
	Daily labor	15	5	0.57 (0.20, 1.64)	0.47 (0.45, 1.48)	0.197	
Type of marriage	Arranged	306	237	1	1		
	Loved	33	12	0.47 (0.24, 0.93) <sup>a</sup>	0.71 (0.33, 1.52)	0.373	
	Forced	11	8	0.94 (0.37, 2.37)	1.17 (0.42, 3.25)	0.759	
Partners age	18-30	157	67	0.35 (0.16, 0.75) <sup>a</sup>	3.47 (0.19, 64.52)	0.404	
	31-45	146	137	0.77 (0.37, 1.63)	6.60 (0.40, 109.41	0.188	
	46-55	33	36	0.90 (0.38, 2.10)	0.30 (0.06, 1.58)	0.156	
	>55	14	17	1	1		
Partners educational	Uneducated	96	101	3.51 (1.35, 9.11) <sup>a</sup>	3.64 (1.07, 12.38)	0.038 <sup>b</sup>	
status	Elementary	180	112	2.07 (0.81, 5.32)	2.83 (0.86, 9.29)	0.087	
	High school	54	38	2.35 (0.86, 6.39)	2.83 (0.83, 9.68)	0.097	
	College and above	20	6	1	1		
Alcohol intake	Yes	241	141	1.89 (1.30, 2.54) <sup>a</sup>	1.92 (1.31, 2.81) <sup>b</sup>	0.001 <sup>b</sup>	
(partner)	No	109	116	1	1		
Aggressiveness	Yes	74	39	1.50 (0.44, 1.02) <sup>a</sup>	1.41 (0.86, 2.29)	0.170	
(partner)	No	276	218	1	1		
Dominance on family affairs	Intimate partner only	49	65	1	1		
	Both equally	272	166	0.46 (0.30, 0.70) <sup>a</sup>	0.30 (0.18, 0.51) <sup>b</sup>	0.000 <sup>b</sup>	
	Wife only	29	26	0.68 (0.35, 1.29)	0.59 (0.29, 1.21)	0.152	
Family size	2	112	49	1	1		
	3-5	187	124	1.52 (1.01, 2.27) <sup>a</sup>	1.40 (0.81, 2.42)	0.231	

**TABLE 4** Univariate and multivariate logistic regression analysis of associated factors of intimate partner violence among married women in Jeldu district, 2021.

(Continues)

		Lifetime IPV		Odds ratio		
Variable	Characteristics	Yes	No	Crude (95% CI)	Adjusted (95% CI)	p Value
	>5	51	84	3.77 (2.32, 6.11) <sup>a</sup>	4.54 (1.89, 10.91) <sup>b</sup>	0.001 <sup>b</sup>

Note: Bold cell indicates adjusted odd ratio whose 95% Cl didn't include. Abbreviations: Cl, confidence interval; IPV, intimate partner violence.

<sup>a</sup>Significant at *p*-value < 0.25.

<sup>b</sup>Significant at *p*-value < 0.05.

Pauls and Shire Endasilasie were facility-based. The other possible reason for the differences might be the study subjects; for instance, the study conducted in Abay Chomen excluded nonpregnant women during the study. However, this finding was lower compared to a study done in Bale Zone in Ethiopia.<sup>1</sup>

In this study, women who have uneducated husbands were almost four times more likely to have IPV as compared with those whose husbands had college and above level (AOR = 3.64, 95% CI: 1.07–12.38), this finding is supported by the study done in Debre Markos town in Ethiopia,<sup>30</sup> Bangladesh.<sup>33</sup> The possible reason for observed high IPV among women partners with lower educational status might be because men with higher education may have improved awareness about the risk of IPV on their wife's health, and might be more likely to solve their problem via communication and cognitive skills than using force or any form of violence. In addition, school programming might be helped them learn about the rights of women, and change their poor attitude toward women in society.

In this study: partners who did drink alcohol were about 2 times more likely to violate their wives than those who didn't drink alcohol (AOR = 1.92, 95% CI: 1.31-2.81). This finding was supported by the findings of studies done in Debre Markos town in Ethiopia,<sup>30</sup> Bale zone in Ethiopia,<sup>1</sup> Ofla District, Ethiopia,<sup>11</sup> a previous systematic review and meta-analysis done in Ethiopia,<sup>34</sup> and a study done in Wondo Genet district, Ethiopia.<sup>31</sup> This may be because of the fact alcohol consumption could directly affect the consumers' thinking and cognitive potential. This distortion in thinking might cause the users to behave in conflict in the relationship and lead to control over their wives. This is also supported by findings from FGD discussion which indicated that partners who drink alcohol beat their wives many times. Furthermore, since money is needed for buying alcohol and family need like food, clothes, and children's exercise book, pen, and the like when money is scarce there might be a conflict which may finally lead to IPV.

In this study, women who dominate family affairs equally with their partners were found to be less likely to experience IPV as compared to those whose family affairs were dominated by their husbands alone (AOR = 0.30, 95% CI: 0.18–051). This finding is supported by findings of previous systematic reviews and meta-analyses done in Ethiopia<sup>34</sup> and a study done in Ofla District, Tigray, Ethiopia.<sup>11</sup> Furthermore, this study found that

IPV was almost 5 times more likely higher among women who reported that their family size was more than five as compared to those women whose family size was two (AOR = 4.54, 95% Cl: 1.89–10.91). This indicates that large family size was a risk factor for IPV.<sup>35</sup> This finding was supported by a study done in Ambo District, Ethiopia.<sup>36</sup> This might be due to the increased scarcity of money in the family with increased family size and might predisposing factor of conflict between husband, wife, and children. Finally, this conflict might lead to violence against women. Even if this study brought recent and important findings about IPV in rural areas of Ethiopia; which is generalizable for that population, it has some limitations. First, women might have been hided some information due to family secret, recall bias and social desirability bias. Second, the cross-sectional nature of the study has a limitation to determine temporality of causality.

## 5 | CONCLUSION

The prevalence of IPV was relatively higher in the study area. Alcohol intake by partner, partner's lower educational status, dominance of partner in family affairs, and higher family size were factors significantly associated with IPV. Therefore, the district health department in collaboration with local women's affairs, health extension workers, gender offices, and district and regional educational sectors should design appropriate strategies and work hard to tackle the problem. Especially, the above identified factors should be targeted for the intervention. The substance (alcohol) use reduction, strengthening family planning service, and awareness creation among husbands were suggested.

### AUTHOR CONTRIBUTIONS

Geremew Yadesa: Conceptualization; data curation; formal analysis; investigation; methodology; software; writing—original draft; writing review and editing. Elias Teferi Bala: Conceptualization; data curation; formal analysis; investigation; methodology; software; visualization; writing—original draft; writing—review and editing. Tufa Kolola: Conceptualization; data curation; formal analysis; investigation; methodology; software; visualization; writing—original draft; writing—review and editing. Lencho Kajela Solbana: Conceptualization; data curation; formal analysis; investigation; methodology; software; visualization; writing—original draft; writing—review and editing.

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# CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

## DATA AVAILABILITY STATEMENT

The data set analyzed for this study's findings is available with the corresponding author and, therefore can be assessed on reasonable request.

### TRANSPARENCY STATEMENT

The lead author Geremew Yadesa affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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