



violence against girls at school institutions might be important to enforce policy makers and different stakeholders to integrate this problem

## Methods

### Study design, area and period

Institution based cross-sectional was conducted on high schools students in SNNP regional state, Dilla town from April to March 2015 G.C. Dilla town is the center of the Gedeo zone. The town is located 359 kilo meter distance far from Addis Ababa in the southern part of Ethiopia. Dilla has an estimated total population of 209,000 of whom 107,000 were males and 102,000 were females. There are three public high schools and three private high schools in the town in 2015. Trade is the main source of income of the residents.

### Sampling size determination and procedure

It was determined by Level of significance (0.05), Power (0.50) with  $z=95\%$  confidence interval and by considering assumptions of ( $p$ =proportion of prevalence) sexual violence among high school students in Ethiopia was 25% from the study done in Harare region [7], Then by adding 10% of non respondents and adjusting of the sample size since ( $n < 10,000$ ), thus total sample size for this study is 280. A series of sampling methods was used to achieve actual study subjects. The stratified sampling proportional to size allocation method used based on their grade (9<sup>th</sup>-12<sup>th</sup>). Finally a simple random sampling technique was applied to select actual participants by using their alphabetical registration numbers/roster as sampling frame. Finally the study subject was selected using proportional allocation in each class.

### Data collection and analyses procedures

**Data collection instruments and collection technique:** Pretested and structured self-administered questionnaires was prepared in English and then translated into Amharic and back to English to ensure its consistence of translation. The questionnaire was developed by adapting other questionnaires previous similar studies materials and review of relevant literature. With three days training three diploma holder facilitated and guided the data collection process.

**Data quality control issues:** Data quality control issues was insured by conducting the pretest prior to the actual study period on 5% of the students from my total sample study subjects on the other high school students in Yirgachefe town. It was also insured by giving training for the facilitators as well as strict and regular supervision at the period of data collection.

### Data processing and analysis procedures

First the data was checked for completeness and consistency. Then it was coded and entered in the computer using EPI data software. Then, data was analyzed by using SPSS version 21.0. Descriptive statistic was used to explain the study participants in relation to study variables. A Bivariate analysis was performed to determine the effect each of factors on the outcome variable. Only factors with  $p$  value  $< 0.2$  on Bivariate analyses were kept for multivariate analyses and a  $p$  value of  $< 0.05$  on multivariate analyses was considered as statistically significant.

Total	273	100
Living with		
With my parents	219	80.2
With my boy friend	13	4.8
With my husband	6	2.2
With relative	30	11
Alone	5	1.8
total	273	100
Marital status		
Yes	7	2.6
No	266	97.4
Education		
Grade 9 <sup>th</sup>	104	38.1
Grade 10 <sup>th</sup>	72	26.4
Grade 11 <sup>th</sup>	55	20.1
Grade 12 <sup>th</sup>	42	15.4
Residence		
Rural	10	3.7
Urban	263	96.3

**Table 1:** Frequency distribution of socio demographic distribution of female high school students under study in Dilla town Gedeo zone SNNP, Ethiopia 2015 G.C.

### Family history of the respondents

From 273 of the respondents 115(42.1%) of their father educational level were certificate and above. But majorities of the respondents father educational level was only grade 12<sup>th</sup> completed, from this parents 33(12.1%) was illiterate. Majority 116(42.6%) of the respondents mother educational level was up to 8<sup>th</sup> grade completed, 64(23.4%) had certificate and above and 43(15.8%) of the respondents mother was they cannot read and write (Table 2).

From 273 of the respondents majority 201 (73.6%) of the students both parents had live together; 28 (10.3%) of the respondents parent were divorced, 34 (12.5%) of the respondents only mother alive 10 (3.7%) of the respondents were father only alive. More than half 147 (53.8%) of the respondents family income was between 1000 and 2500birr in month and 86 (31.5%) of the respondents family income were less than one thousands birr in month.

use chat and majority 239 (87.5%) of the respondents were not use chat. From the respondents who was using chat 2 (2.7%) of the respondents using chat daily, 17 (50%) of the respondents uses chat at least once or twice a week, 10 (29.4%) of the respondents uses chat one up to three times in a month and 5 (14.7%) of the respondents use chat occasionally less than once in a month (Table 3).

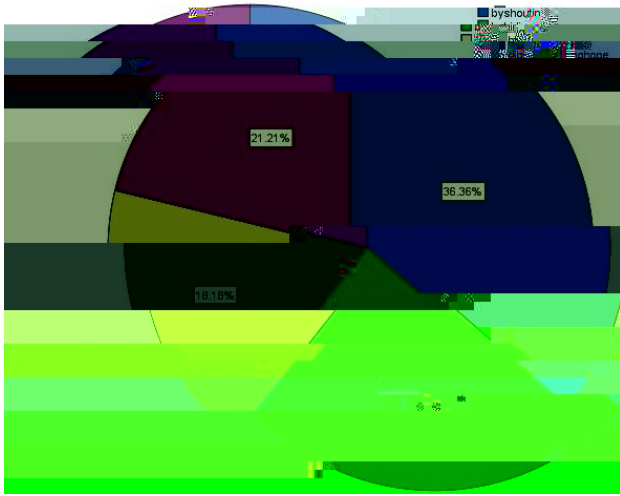
The other associated factor was drug or substance use, from 273 study participants 21 (7.7%) of the respondents had use drug or substance, majority 252 (92.3%) of the respondents had not uses drug or substances. From the respondents who had uses drug or substances, 1 (4.8%) of the respondents uses drug or substances daily, 2 (9.5%) of the respondents uses drug or substances at least once or twice a week, the majority 12 (57.1%) of the respondents uses drugs or substances one up to three times in a month and 6 (28.6%) of the respondents uses drug or substances occasionally less than once in a month (Table 3).

Variables	Frequency	Percent (%)
Drink alcohol		
Yes	75	27.5
no	198	72.5
Time drink alcohol		
Every day	2	2.7
Once or twice a week	29	38.7
1-3 times a month	21	28
Occasional day		

Moreover most 9 (28.1%) of the students encountered sexual violence by unknown person and majority 22 (68.8%) of the students sexual violence was done by older men compared the female students age (Table 4).

Variables	Frequency	Percent (%)
Have regular boyfriend currently		
Yes	54	19.8
No	219	80.2
Had a sexual intercourse		
Yes	64	23.4
No	209	76.6
Conditions of start sexual intercourse		
In a marriage	11	16.9
Personal desire	18	27.7
Peer pressure	21	33.8
For financial purpose	4	6.2
For passing examination	5	7.7
By forcing against you	5	7.7
total	64	100
Age at first sexual intercourse		
<17years	44	67.7
17-19 years	20	30.8
>19 years	1	1.5





**Figure 1:** Indicates the distribution of female high school student's mechanism of escape from sexual violence attempt.

## Discussion

In my study the prevalence of sexual violence its associated factors had been assessed and the life time prevalence rate of sexual violence among female high school students was 13.2% when compared to study/s conducted in Harare shows that Sexual violence among in school adolescents were 25% (12, 7) and a study conducted in Bahir Dar town among private college female students revealed that the prevalence of sexual violence among female college students was 37.3% [12,13]. And also in this study had a lower prevalence rate than the study of Harare and Bahir Dar town. In addition to that a cross sectional study conducted in Iran indicates that the prevalence of sexual violence against women was found to be around 63.8%.

Regarding's to factors associated with sexual violence in this study using chat is one of the important contributing factors for sexual violence of school students in dilla town ( $p=0.000$ ) (Table 5) and in the other hand using drugs or substances like shisha had significant association with sexual violence with ( $p=0.030$ ). When I compared with other past study on sexual violence, a study conducted in Harare revealed that students used addictive drugs like alcohol (18%), chat and shish (7.2%) as very important contributing factors for sexual violence's [12,7]. Also this study

## Author's Contribution

Desalegn Tarekegn conceived and designed the study and collected data in the field, performed analysis, interpretation of data, and drafted the manuscript. Mr. Balcha Berhanu and Mr. Yigrem Ali involved in the design, analysis, and interpretation of data and the critical review of the manuscript. All authors approved and read the final manuscript.

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