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Sexual Violence and Associated Factors among High School Students in Butajira Town, South Ethiopia

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Abstract

Background: Sexual violence is a serious public health problem affecting millions of girls throughout the world. A wide range of sexually violent acts can occur in different circumstances and settings. This study aimed to determine the magnitude of sexual violence and identify associated factors among female high school students in Butajira town, South Ethiopia.

Methods: A cross-sectional study using quantitative data collection method was carried out in high schools in Butajira town from June 4-6, 2012. A total of 332 study subjects were selected from all female students in Butajira and Mekicho Millennium schools using simple random sampling technique. Data were collected using structured self-administered questionnaire. The data were entered into SPSS window version 16.00 and descriptive, binary, and multiple logistic regression analyses were carried out.

Result: Three hundred thirty two female students participated in the study. The lifetime and current year prevalence of sexual violence was 109 (32.8%) and 55 (16.6%) respectively. The lifetime prevalence of completed and attempted rape was 4 (1.2%) and 14 (4.2 %) respectively. Life time sexual violence was associated with having boyfriend or husband [AOR (95%CI)=0.15(0.07, 0.30)], family control [AOR (95%CI)=1.92(1.16, 3.17)] and witness about parental violence [AOR (95%CI)=0.49 (0.29, 0.83)]. Unwanted pregnancy, depression, suicidal ideation, poor academic achievement, rejection from family and friends were some of the consequences of sexual violence.

Conclusion and recommendation: Sexual violence is a public health problem among female students in the study area. Physical, psychological and social effects of sexual violence were common. Thus, programs should aim to solve the problem among female students involving the men/boys in interventions since most of the perpetrators were males.

Keywords: Sexual violence; Factors; Butajira town

Acronyms and Abbreviations

AIDS: Acquired Immune Deficiency Syndrome; AOR: Adjusted Odds Ratio; CI: Confidence interval; EDHS: Ethiopian Demographic and Health Survey; HIV: Human Immune Deficiency Virus; NGO: Non-Governmental Organization; OR: Odds Ratio; SPSS: Statistical Package for Social Sciences; STIs: Sexually transmitted infections; VAW: Violence Against Women; WHO: World Health Organization.

Background

Violence against women/girls (VAW) is widespread and can take place in different circumstances, forms and settings. It is a profound health problem that saps women's energy, compromises their physical and mental health, and erodes their self-esteem. There is increasing international consensus that the abuse of women and girls, regardless of where it occurs, should be considered as "violence against women," as it largely stems from women's subordinate status in society with regard to men [1]. Violence against women includes all forms of physical, psychological and sexual violence that are related to the survivors' gender or gender role in a society or culture [2].

Violence against women and girls continues to be a global epidemic that kills, tortures, and maims-physically, psychologically, sexually and economically. It is one of the most pervasive of human rights violations, denying women and girls' equality, security, dignity, self-worth, and their right to enjoy fundamental freedoms. Even though most societies proscribe violence against women, the reality is that violations against women's human rights are often sanctioned under the garb of cultural practices and norms, or through misinterpretation of religious tenets. Moreover, when the violation takes place within the home, as is very often the case, the abuse is effectively condoned by the tacit silence and the passivity displayed by the state and the law-enforcing machinery [3].

All violence against women has serious consequences for their mental and physical wellbeing, including their reproductive and sexual health. Worldwide, abuse by a husband is one of the most common forms of violence against women. Acceptance of this practice reflects women's low status and the perception that men are superior to women. In addition to adverse physical health outcomes, this form of violence lowers a woman's self-esteem and her image in society,

leading to her disempowerment. Like other countries, violence against women is also common in Ethiopia, especially intimate partner violence, in both urban and rural families. As a result the Government of Ethiopia revised its family law in 2000 and its criminal law in 2005 to protect the rights of women and children and to promote gender equality and equity. Since a society tolerates and accepts violence against women, its eradication is more difficult [4].

Sexual violence is one form of violence against women which is endemic in communities around the world, cutting across class, race, age, religion and national boundaries. In many cases, it begins in childhood or adolescence. Exposure to sexual coercion significantly increases girls' and women's chances of early sexual debut, experiencing forced sex, engaging in transactional sex, and non-use of condoms [5,6].

World Health Organization defines sexual violence as any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work [5].

There is no one single, definitive "cause" of sexual violence. There may be many different contributing factors, at the individual, relationship and societal/cultural levels. Social isolation, lack of access to community services and support, and to the criminal justice system, may further increase a woman's vulnerability to violence-or compound the effects of abuse [6].

Certain community and societal-level risk factors are associated with higher or more severe rates of sexual and gender-based violence. WHO identifies factors such as traditional gender norms that support male superiority and entitlement, social norms, weak community sanctions against perpetrators, poverty, high levels of crime and conflict in society more generally [3,5].

Sexual violence and harassment damages their physical and psychological health. It undermines the pursuit of internationally agreed public health goals to enable adolescents to deal in a positive way with their sexuality, and to reduce unintended pregnancies and sexually transmitted infections including HIV infection. For girls and young women, it severely limits their ability to achieve their educational potential. For society, therefore, it undercuts the transformatory power of education [7].

In general, sexual violence has a significant negative impact on the health of the population. The potential reproductive and sexual health consequences are numerous such as unwanted pregnancy, sexually transmitted infections (STIs), HIV/AIDS, sexual dysfunction and increased preponderance for adoption of risky sexual behaviors. The mental health consequences of sexual violence can be just as serious and long lasting. Survivors of child sexual abuse, for example, are more likely to experience depression, substance abuse, post-traumatic stress disorder (PTSD) and suicide in later life than their non-abused counterparts [5,8].

Psychological consequences may include feeling of worthlessness and powerlessness, difficulty in trusting people, shame, fear and guilty feeling about sex; and mental health problems [9]. The social consequences of abuse can also be enormous; ranging from poor educational achievement to withdrawal from school, rejecting by family and/or friends, having multiple partners, drug and alcohol abuse, and in severe cases prostitution [10].

Female students are vulnerable to sexual violence due to various reasons. Accurate information on the prevalence of sexual violence is difficult to obtain in any circumstances, as victims often decline to report their experiences due to personal trauma, fear of reprisals, and societal stigma. Data concerning sexual violence among high school female students in Ethiopia is vital in determining the magnitude of sexual violence and factors associated with it. Besides, decrease in the prevalence of sexual violence would have a beneficial effect on the health of female students/women as well as the whole society and the country's socio-economic development. This study attempts to assess the magnitude of sexual violence and associated factors among female students of high schools in Butajira town. Therefore, the findings of this study will be an important input for future interventions and programs to understand the magnitude of sexual violence and its predictors in designing strategies and interventions that will alleviate the problem among female students in Ethiopia in general and Butajira town in particular.

Methods and Materials

The study was carried out in Butajira town which is located in southern Ethiopia. The town has one Zonal hospital, one Nongovernmental hospital, one health center, ten private clinics and seven pharmacies. There were two high schools in the town consists of 4004 students in 2012 academic year. Of these females were 1616 and males account 2388. One elementary school, one technical College and two private health science colleges are also found in a town. The study was conducted from June 4-6, 2012.

A cross-sectional study design using quantitative method of data collection was used in this study. The target population for this study was female regular students attending 9-12th grades in Butajira preparatory and Mekicho Millennium high school. The study population was a sample of female students from the target population. The sample size was estimated to be 338 considering the proportion of 56% from previous study and a non-response rate of 10% was also added. The sample size obtained was proportionally allocated to each grade based on the percentage of female students in each grade to the source population and then study subjects were selected separately from each grade using simple random sampling method from students list.

Before data collection, the questionnaire was categorized in to six parts which assesses sociodemographic characteristics, family history, sexual history, substance use, sexual violence and consequences of sexual violence. In this study the dependent variable was life time sexual violence. It was assessed using yes or no questions on whether the female students experienced unwelcome touch or verbal harassment or unwelcome/non-consensual kissing or completed rape or attempted rape. Socio demographic characteristics were measured by responses on questions concerning age, grade, ethnicity, religion, living arrangement. The family information was measured from responses on questions concerning educational status, family size, birth order within the family, family income, parental conflict and free discussion with the family.

Substance use was measured by questions on chat chewing, alcohol use, smoking, cocaine and shisha use. Sexual factors were measured by responses from questions describing sexual debut, age at first sex, number of sexual partners and reasons for not having sexual intercourse.

Information on consequences of sexual violence was measured by questions on pregnancy, abortion, STDs, psychological problems, unusual discharge from genitalia and poor school achievement.

Ethical approval was obtained from Jimma University, research and publication committee. Prior to data collection, informed consent was obtained from all study participants. Among those who were younger than 18, consent was obtained from their resident parent or guardian. Each respondent was informed about the objective of the study and confidentiality was kept at each step of data collection and processing. The respondents were informed that the information obtained in this study was used only for research purposes. Data collection facilitators were trained strongly on how to keep participant's confidentiality. Also explanation about the rights of participants including their full right to not participate at all or withdraw at any time was done.

Data were collected using structured self-administered questionnaire. The questionnaire was initially adapted from previous similar studies [7,9,11,12] after the necessary modifications were made based on contexts & objective of the study. The questionnaire was pre-tested on 5% (seventeen females) of the sample outside the two high schools in Butajira Technical and Vocational Education and Training school three days prior to data collection. Then necessary modifications were performed based on the pre-test. The questionnaire was initially prepared in

English and then translated into Amharic language. The Amharic version was again translated back to English language to check for any inconsistencies or distortions in the meaning of phrases and concepts.

Six female data collection facilitators who have completed 10th & 12th grade and three diploma nurse supervisors were assigned for questionnaire administration and supervision respectively.

During actual data collection to ensure sincere response, students were assured that the information gathered will be treated confidentially by strongly emphasizing the anonymity of questionnaire responses. During data collection the students separated to avoid contamination of information. To maximize confidentiality of answers, teachers were not present during the data collection time and no discussion was permitted throughout the process. Completed questionnaires were checked for their completeness and consistency. The data collection facilitators and supervisors were trained for two days. Anything which is unclear and ambiguous was clarified for the students. The whole process of data collection was supervised by principal investigator.

After the completion of data collection, editing and coding was done then the data were entered, cleaned and analyzed using SPSS version 16.0. The data were summarized and descriptive statistics were computed for all variables. Frequency, mean and standard deviation were obtained for continuous variables while the categorical variables were assessed by computing frequencies.

Crude odds ratio and 95% confidence interval were calculated for each variable of interest.

Binary and Multiple logistic regression analysis were done using backward logistic regression method to analyze factors associated with life time sexual violence. In the first step bivariate analysis were employed to see the association between predictor variables versus lifetime sexual violence. Multiple logistic regression analysis was done to control the effect of confounding.

The results of this study will be disseminated to the schools, District Health Bureau, Education Bureau, Women affairs Bureau, Zonal Education Bureau, different NGOs and others that intervene to overcome the sexual violence. The findings will also be communicated to local reproductive health planners and other relevant stake holders at Zonal and Woreda level in the area to enable them take recommendations in to consideration during their planning process.

Result

Socio-Demographic characteristics of study participants

From a total of 338 female students who were sampled for the study, 332 were involved in the study with response rate of 98.2%. Among 332 study subjects, 151(45.5%) of students were in 9th grade, 83 (25.0%) were 10th grade, 51 (15.4%) were 11th grade and 47 (14.2%) were 12th grade. The mean age of the participants was 16.6(SD+1.6) years. The predominant religion is Orthodox 179 (53.9%), followed by Muslim 110 (33.1%), Protestant 41 (12.3%) and others 2 (0.6%). The majority of the participants 280 (84.3%) were Gurage followed by Amhara 18 (5.4%), Silte 17 (5.1%), and Oromo 13 (3.9%) in ethnicity. Forty two (12.7%) were ever married or lived with a male partner. Among these 12 (28.6%) were married, 30 (71.4%) currently have boyfriend.

Two hundred eighteen (65.7%) were living with their parents, 51 (15.4%) with their female friends/classmates, 16 (4.8%) with their relatives, 35 (10.5%) living alone and 12 (3.6%) live with husband or boyfriend. The majority (n=297) of the respondents were financially supported by their parents, 12(3.6%) by relatives, 9(2.7%) support themselves, and 14 (4.2%) by their boyfriend/husband (Table 1).

Variable	Frequency (%)
Age	
14-16	165 (49.7)
17-19	151(45.5)
≥20	16(4.8)
Religion	
Orthodox	179(53.9)
Muslim	110(33.1)
Protestant	41(12.3)
Others*	2(0.6)
Ethnicity	
Gurage	280(84.3)
Amhara	18(5.4)
Silte	17(5.1)
Oromo	13(3.9)
Others**	4(1.2)
Former marriage or living with male partner	
Yes	42(12.7)

No	290(87.3)
Currently living with	
Both parents	218(65.7)
With female friends	51(15.4)
Living alone	35(10.5)
With relatives	16(4.8)
Husband/boyfriend	12(3.6)
Source of income	
Parents	297(89.5)
Relatives	12(3.6)
Self-supporting	9(2.7)
Husband/boyfriend	14(4.2)

Table 1: Socio-demographic Characteristics of the participants, Butajira town, South, Ethiopia, June 2012, (n=332), Others*: Catholic, Adventist, Others**: Hadiya, Tigre, Wolyta.

Socio-Demographic characteristics of the family

Concerning the educational status of their father's, 55 (16.6%) were illiterate, 99 (29.8%) were able to read and write but without any formal education. On the other hand, 104 (31.3%) of participants' mother were illiterate, 117 (35.2%) were able to read and write but without any formal education. Two hundred eighty three (85.2%) and 319 (96.1%) of participants' fathers and mothers were alive, respectively. Of the respondents, 265 (79.8%) have their mothers and fathers living together currently, 42 (12.7%) only their mothers alive. Two hundred nine (63.0%) of the respondents reported that their family control is tight on them, 120 (36.1%) medium, and 3 (0.9%) perceived as loose or free (Table 2).

Variable	Frequency (%)
Parents living together	
Yes	265 (79.8)
Divorced/separated	12 (3.6)
Were not living together from the beginning	3 (0.9)
Only mother is alive	42 (12.7)
Only father alive	8 (2.4)
Both of them not alive	2 (0.6)
Father's literacy status	
Illiterate	55 (16.6)
Read and write	99 (29.8)
Primary	68 (20.5)
Secondary	28 (8.4)
Above secondary	51 (15.4)
I don't know	31 (9.3)
Mother's literacy status	
Illiterate	104 (31.3)
Read and write	117 (35.2)
Primary	39 (11.7)
Secondary	21 (6.3)
Above secondary	29 (8.7)
I don't know	22 (6.6)
Family control	
Tight	209 (63.0)
Medium	120 (36.1)
Loose/ free	3 (0.9)

Table 2: Socio-demographic Characteristics of the participants' family, Butajira town, South, Ethiopia, June 2012 (n=332).

Sexual violence related variables

Two hundred forty one (72.6%) of the study participants reported to freely discuss reproductive health issues with their family but 91 (27.4%) reported that they were not discussed at all. Of the 241 students, 98 (40.7%) discussed with their mothers, 76 (31.5%) with their sisters, 28 (11.6%) with their brothers, 17 (7.1%) with their fathers, 13 (5.4%) discussed with the whole family and 9 (3.7%) discussed with both their mothers and fathers together. Among the respondents, 96 (28.9%) witnessed parental violence in childhood. The remained 236 (71.1%) reported as no parental violence in childhood of the total study subjects, 292 (88.0%) received information on sexual violence, the rest 40 (12.0%) were not received at all. All of the study subjects who received information replied that the information was useful to prevent sexual violence. Of the total study subjects, 182 (54.8%) considered themselves that they are at risk of sexual violence however, 150 (45.2%) not perceived that they are at risk. Of those who considered themselves at risk, 81 (44.5%) suggested resisting peer pressure as a way to prevent sexual violence whereas avoiding sexual relations with males, avoiding drinking alcohol, avoiding watching pornographic materials or films, following religion were the methods suggested by 76 (41.8%), 65 (35.7%), 98 (53.8%), and 3 (1.6%), respectively.

One hundred fifty three (46.1%) of the study subjects perceived that sexual violence is common in the schools however, 179 (53.9%) not perceived. One hundred fifteen (34.5%) responded that the cause for sexual violence is poor family control on a girl/female student, 92 (27.7%) tight family control, 45 (13.6%) losing cultural value, 91 (27.4%) girls bad behavior, 65 (19.6%) males bad behavior, 115 (34.6%) peer pressure, 117 (35.2%) watching pornographic materials/ films as cause for sexual violence. Of the 332 study subjects, 326 (98.2%) disagree on sexual intercourse before they get married while 6 (1.8%) have agreed on sexual intercourse before marriage.

Seven (2.1%) of the subjects had habit of chewing chat, 18 (5.4%) tried only once or twice in their life time, and 307 (92.5%) of them never chewed chat. Of the 7 study subjects who chewed chat, 2(28.6%) chew once or twice a week, 2 (28.6%) chewed 1-3 times in a month

and 3 (42.8%) of them chewed chat occasionally. Of the study subjects, 23 (6.9%) drunk alcohol, 26 (7.8%) tried alcohol only once or twice in their life, and 283 (85.3%) reported as never used alcohol. From those used alcohol, 4 (17.4%) of used alcohol 1-2 times a month and 19 (82.6%) used alcohol occasionally. Thirty (9.0%) of the study subjects have friends who drink alcohol but the majority 302(91.0%) doesn't have.

Sexual history of the respondents

Of the total study subjects, 23 (6.9%) had started sexual intercourse. The mean age at first sexual intercourse was 16.8 (SD± 1.8) years. Of those started sexual intercourse, 11 (47.8%) were due to marriage, 2 (8.7%) were forced, and 10(43.5%) were due to love affair. Of those started sex, 10 (43.5%) of them practice sex with sexual partner with similar age, 8 (34.7%) older, 2 (8.7%) younger and 3(13.0%) of them did not know age of their first sex mate. From those who started sex, 8 (34.8%) reported that they felt nothing after practiced of sex, 7 (30.4%) felt comfortable, 7 (30.4.8%) were become depressed and 1 (4.3%) felt suicidal ideation. Of those who started sex, 22 (95.7%) have one sexual partner within the last 12 months and 1 (4.3%) had two sexual partners within the last 12 months. Of the 23 study subjects who started sex, 22 (95.7%) experienced one sexual partner till now and 1 (4.3%) experienced two sexual partners. On the other hand, the reasons given for not starting sexual intercourse by the 309 study subjects were the need to stay until marriage 138 (44.7%), no desire to practice sex 93 (30.1%), due to religious reasons 64 (20.7%), fear of STDs and HIV 17 (5.5%), need to concentrate on education 13 (4.2%), fear of parents 2 (0.6%), and fear of pregnancy 3 (1.0%) (Table 3).

Variable	Frequency (%)
Age at 1st sex n=23	
12-15	4(17.4)
16-19	18(78.3)
≥20 years	1(4.3)
Reasons for sex	
Love affair	10(43.5)
Marriage	11(47.8)
Forced	2(8.7)
Age of sexual partner at 1st sex	
Same age	10(43.5)
Older than	8(34.7)
Younger than	2(8.7)
I don't know	3(13.0)
Reasons for not having sex n=309	
Want to wait until marriage Yes	138(44.7)
No desire to practice sex Yes	93(30.1)
Religious reasons Yes	64(20.7)
Fear of STDs/HIV Yes	17(5.5)
Need to concentrate on education Yes	13(4.2)
Fear of parents Yes	2(0.6)
Fear of pregnancy Yes	3(1.0)

Table 3: Sexual histories by respondents, Butajira town, South, Ethiopia, June 2012.

Sexual violence and consequences

The prevalence of sexual violence in life time was 109 (32.8%). The prevalence of completed and attempted rape in lifetime was 4 (1.2%) and 14 (4.2%), respectively. Of the total study subjects, 61 (18.4%) were experienced unwelcome touching on sensitive body parts, 73 (22.0%) were verbally harassed, 46 (13.9%) unwelcome kiss, 4 (1.2%) completed rape, and 14 (4.2%) experienced attempted rape in their life time.

Of the total 18 completed/attempted rape cases, 6 (33.3%) were performed at the victims' homes, 5 (27.8%) at perpetrator's home, 2 (11.1%) at the hotel, 2 (11.1%) relative's home, 1 (5.6%) at party, 1 (5.6%) at friend's home, 1 (5.6%) on the road. From the overall 18 attempted or completed rapes, 7 (38.9%) of them happened in the evening, 6 (33.3%) in the afternoon, 3 (16.7%) at mid night, 1 (5.6%) in the morning and 1 (5.6%) did not remember the time. Of 18 cases of attempted or completed rapes, 4 (22.2%) were performed by relatives, 3 (16.7%) by boyfriends, 4 (22.2%) by their classmate, 3 (16.7%) by neighbor, 2 (11.1%) by unknown individual, 1 (5.6%) by a teacher, and 1 (5.6%) by an employer (when she was servant).

The mechanisms used by the perpetrators were hitting the victim 7 (38.9%), using physical force 7 (38.9%), pointing a knife 2 (11.1%) and making the victim to be drunken 2 (11.1%). Thirteen (66.7%) of the perpetrators were known by the victims, 3 (16.7%) of them introduced to the victim by their friends, 2 (11.1%) were relatives and 1 (5.6%) were not known by the victim. Of the 18 victims of attempted/performed rape, 5 (27.8%) shared the problem with others. Of those shared their problem, 2 (40.0%) of them told to their friends and 3 (60.0%) to their parents. Of 14 attempted rapes, 3 (21.4%) escaped by shouting (somebody arrived), 1 (7.1%) by running, 4 (28.6%) by fighting, 6 (42.8%) by giving false appointment. Of 14 study subjects who experienced attempted rape, 10 (71.4%) of them faced one event of the act and 4 (28.6%) two times.

Of the four study subjects who experienced performed rape, 3 (75.0) faced two instances of the act and 1 (25.0%) two times. Of those faced attempted rape/completed rape, only 1 (5.6%) applied to the legal system (to the police and the perpetrator imprisoned). The reasons given by the victims for not applying to the legal system were 3 (17.6%) were not know what to do at that time, 4 (23.5%) due to fear of parents, 4 (23.5%) said it is a trial (I am not raped, so no need to report), 1 (5.9%) because he is my friend, 2(11.8%) to hide the issue because he is my relative, 1 (5.9%) due to afraid of the perpetrator and 2 (11.8%) to hide from their husband.

Of the four completed rape cases, 1 (25.0%) get pregnant and 1 (25.0%) swelling around the genitalia. Concerning psychological problems, 1 (25.0%) reported that they have felt hopelessness, 1 (25.0%) suicidal ideation, 3 (75.0%) self-blame and 2 (50.0%) have developed a sense of excess fear. Three of the rape victims (75.0%) reported that their academic achievement decreased after they were

raped, 1 (25.0%) withdrawn from school, 1 (25.0%) were rejected by her family and 1 (25.0%) rejected by her friends.

Factors associated with sexual violence

Binary and Multiple logistic regression analyses were done using backward logistic regression method to analyze factors associated with lifetime sexual violence. On binary logistic regression analysis having boyfriend/husband, source of income, witness about parental violence, alcohol use and family control were associated with lifetime sexual violence. But when adjusted, having boyfriend/husband, family control and witness about parental violence were identified as predictors of life time sexual violence.

The multivariate analysis revealed that female students who had boyfriend/husband were 15% protected from sexual violence. [AOR (95%CI)=0.15(0.07, 0.30]. Family control was shown to have a significant association with lifetime sexual violence. The odds of having sexual violence was nearly 2 times more among students who didn't have parental control than female students who controlled by their family. [AOR (95%CI)=1.92 (1.16, 3.17)]. Witness about parental violence was significantly associated with sexual violence. Those female students who witnessed parental conflict were 51% protected from having sexual violence. [AOR (95%CI)=0.49(0.29, 0.83] (Table 4).

Variable	Sexual violence		COR (95% CI)	AOR (95% CI)
	Yes	No		
	Freq (%)	Freq (%)		
Having husband/boyfriend				
Yes	30(71.4)	12(28.6)	0.15(0.07, 0.31)*	0.15(0.07, 0.30)**
No	79(27.2)	211(72.8)	1	1
Parents living together				
Yes	87(32.8)	178(67.2)	1	1
No	22(32.8)	45(67.2)	1.00(0.57, 1.77)	1.14(0.62, 2.12)
Source of income				
Parents & relatives	96(31.1)	213(68.9)	1	1
Self & non-relatives	13(56.5)	10(43.5)	0.29(1.22, 6.81)*	1.20(0.42, 3.39)
Alcohol use				
Yes	14(60.9)	9(39.1)	0.28(0.12, 0.66)*	0.52(0.19, 1.39)
Tried only once/twice	10(38.5)	16(61.5)	0.69(0.30, 1.58)	0.93(0.37, 2.30)
Never	85(30.0)	198(70.0)	1	1
Family control				
Yes	59(28.2)	150(71.8)	1	1
No	50(40.7)	73(59.3)	1.74(1.09, 2.78)*	1.92(1.16, 3.17)**
Witness about parental conflict				
Yes	43(44.8)	53(55.2)	0.48(0.29,0.78)*	0.49(0.29, 0.83)**
No	66(28.0)	170(72.0)	1	1

Table 4: Multivariate analysis showing association of factors with lifetime sexual violence among female students, Butajira town, South, Ethiopia, June 2012, *Shows significant association at 95% CI, **Adjusted for having boyfriend/husband, parents living together, source of income, alcohol use, family control and witness about parental violence.

Discussion

In this study the prevalence of sexual violence, associated factors and different effects of sexual violence were identified. The study showed that sexual violence is a public health problem among female high school students in the study area.

The prevalence of sexual violence in lifetime was 109 [32.8%]. This finding is comparable with a study done in Swaziland in which the

prevalence was 33·2% [7]. This finding is in line with a study done in Uganda in which the magnitude of sexual violence was 33.1% [9]. However, the finding is lower when compared with the finding from Sweden 49% [5]. This variation could be due to difference in culture, life style, socio-economy and interventions made across the countries. Moreover the finding is lower when compared with a study done in Addis Ababa, West Shewa and Harar ; 75.9%, 74% and 50% respectively [3,10,11]. This difference could be because of difference in living conditions, cultures and values given to females in different ethnic groups or societies. However, it is higher than the study done in Nigeria in which the prevalence of sexual violence was 22.2% [12,13]. This difference may be attributed to variation between the two countries due to differences in socio-economic, cultural, and behavioral/lifestyle factors. The mean age at first sexual intercourse was 16.8 years. This finding is similar with study done in Harar which was 16 years [12]. On this study 23 (6.9%) of the study subjects initiated sexual intercourse and of this 2 (8.7%) were forced. The magnitude of forced sex as early sexual debut in this study is lower when compared with a study done in Dabat in which forced sex as early sexual debut was 33.3% [14]. The magnitude of early initiation of sexual intercourse in this study is also lower when compared with a study done in South Africa and Addis Ababa in which forced sexual initiation was between 28% and 30% (South Africa) where as 26.1% in Addis [10,15]. This finding is also lower when compared to a study done in Jimma where initiation of forced sexual intercourse was 20.4% [16].

The magnitude of completed rape is lower when we compared with findings from Debark, Addis Ababa and Western Shewa which were 8.8% and 5% respectively. The same is true for attempted rape where the magnitude was 11.5% in Debark, and 10% in Addis and West Shewa [11,17]. This might be due to increased awareness on attempted/performed rape by the study subjects as 292 (88.0%) of them received information on sexual violence as a result the students may take of them. The result is also lower when compared with study done in Nigeria where the magnitude of performed and attempted rape was 15% and 27% respectively [18]. This variation might be aroused from differences in lifestyle or behavioral factors between the students in the two areas.

Of the total 18 performed and attempted rapes 6 (33.3%) were happened at victim's own home. This finding is nearly consistent with a study done in Swaziland which was 26.1% [7]. Most of the perpetrators were relatives 4 (22.2%), boyfriend, 3 (16.7%), neighbors, 3 (16.7%) and others account 8 (44.4%) [7]. In this study, 88.9% of the perpetrators were known by the victims.

In this study only 1(5.6%) of attempted rape/completed rape cases applied to legal system (to the police and the perpetrator imprisoned). However, study done in Adigrat hospital only 42% of the rapists were arrested even though the patients identified 90% of the perpetrators [19]. A study done in Addis Ababa in two hospitals revealed that there is significant delay in reporting of cases to health institution and to the police [16].

Unwanted pregnancy, trauma to genital area and different psychological problems were shown to be the consequences of sexual violence like findings from Adigrat hospital and Jimma town studies revealed [16,20].

Conclusion

This study revealed that sexual violence is a problem with all its negative effects among female students in the study area. Different factors contributing for occurrence of sexual violence were identified such as non-existence of boyfriend/husband, absence of family control and history of conflicts with family. Physical, psychological and social effects of sexual violence were also reported by the respondents specifying that most of the perpetrators were known by the victims of sexual violence

Recommendation

Findings of the study indicated that interventions should aim to reduce or prevent sexual violence by focusing on all of the factors identified. Emphasis should be given on involving the men/boys in interventions that aim in prevention of violence against female students since most of the perpetrators were males. Moreover, working in collaboration with other social and political stakeholders to tackle the violence against female students is also mandatory. Interventions at school level also need to be done particularly making schools safe or violence free to empower female students attain higher education. Awareness creation to female adolescents in schools on how to protect themselves from sexual violence, it's devastating effects and early reporting of cases need due considerations. It is also recommended that attempts should be made to identify factors associated with sexual violence for which this study didn't address.

Authors Contributions

Wegu Nimani and Belayneh Hamdela designed the proposal. Wegu Nimani and Belayneh Hamdela analysed and interpreted the data. Belayneh Hamdela prepared draft manuscript. Wegu Nimani and Belayneh Hamdela read and approved the final manuscript.

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