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Consequences of gender-based violence on female high school students in eastern Ethiopia

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Addisu S. Beyene[*1,2], Catherine L. Chojenta[1] and Deborah J. Loxton[1]*

Centre for Women's Health Research, Faculty of Health and Medicine, University of Newcastle, Newcastle, Australia[1]; School of Public Health, College of Health and Medical Sciences, Haramaya University, Harar, Ethiopia[2]

***For Correspondence:** Email: *addisushunu@gmail.com*; Phone: +251910221055

Abstract

Gender-based violence (GBV) is a significant global public health problem and adversely impacts the physical and mental health of women. This study aimed to determine the consequences of GBV (including sexual, physical, emotional, and overall GBV) on female high school students in eastern Ethiopia. An institutional-based cross-sectional survey was conducted among 1,199 female high school students in eastern Ethiopia using a self-administered questionnaire. Descriptive statistics were calculated. Chi-square tests were used to analyse the data. This study revealed that more than half (55%) of the study participants had experienced any type of GBV during their lifetime. There were statistically significant differences between the educational status and childhood residence of participants who experienced and participants who did not experience sexual violence, physical violence, emotional violence, and any type of GBV in their lifetime ($p<0.001$). Students who had experienced sexual violence during their lifetime reported consequences of physical health, including swelling around genitalia (33.7%), unusual vaginal discharge (30.7%), and injury around the genitalia (23.9%). Mental health consequences included self-blame (35.7%), and anxiety (23.3%). Educational consequences included poor school performance (36.1%), absenteeism (34.6%), and dropout (28.9%). Students who had experienced any type of GBV during their lifetime reported consequences of physical violence, including poor school performance (18.7%), and withdrawal from school (9.0%). The main perpetrators of any type of GBV were reported to be family members, students, or boyfriends/husbands. GBV is a severe public health problem among female high school students. Primary and secondary prevention is vital to curb the consequences of GBV. *(Afr J Reprod Health 2021; 25[4]:22-33).*

Keywords: Gender-based violence, consequences, high school, Ethiopia

Résumé

La violence basée sur le genre (VBG) est un problème de santé publique mondial important et a un impact négatif sur la santé physique et mentale des femmes. Cette étude visait à déterminer les conséquences de la VBG (y compris sexuelle, physique, émotionnelle et globale) sur les lycéennes de l'est de l'Éthiopie. Une enquête transversale en milieu institutionnel a été menée auprès de 1 199 lycéennes dans l'est de l'Éthiopie à l'aide d'un questionnaire auto-administré. Des statistiques descriptives ont été calculées. Des tests du chi carré ont été utilisés pour analyser les données. Cette étude a révélé que plus de la moitié (55 %) des participants à l'étude avaient subi tout type de VBG au cours de leur vie. Il y avait des différences statistiquement significatives entre le statut scolaire et la résidence d'enfance des participants qui ont subi et des participants qui n'ont pas subi de violence sexuelle, de violence physique, de violence émotionnelle et de tout type de VBG au cours de leur vie ($p<0,001$). Les élèves qui ont subi des violences sexuelles au cours de leur vie ont signalé des conséquences sur leur santé physique, notamment un gonflement autour des organes génitaux (33,7 %), des pertes vaginales inhabituelles (30,7%) et des blessures autour des organes génitaux (23,9 %). Les conséquences sur la santé mentale comprenaient l'auto-accusation (35,7%) et l'anxiété (23,3 %). Les conséquences sur l'éducation comprenaient de mauvais résultats scolaires (36, %), l'absentéisme (34,6 %) et le décrochage (28,9 %). Les élèves qui ont subi tout type de VBG au cours de leur vie ont signalé les conséquences de la violence physique, notamment de mauvais résultats scolaires (18,7 %) et le retrait de l'école (9,0 %). Les principaux auteurs de tout type de VBG seraient des membres de la famille, des étudiants ou des petits amis/maris. La VBG est un grave problème de santé publique chez les lycéennes. La prévention primaire et secondaire est vitale pour freiner les conséquences de la VBG. *(Afr J Reprod Health 2021; 25[4]: 22-33).*

Mots-clés: Violences basées sur le genre, conséquences, lycée, Éthiopie

Introduction

Globally, 1 in 3 women faces some type of GBV (Gender-Based Violence) during their childhood, adolescence, or adulthood[1-4]. GBV is more prevalent in developing countries than in developed countries[5]. For example, in a systematic review conducted on the global magnitude of GBV among

children, researchers found that the minimum prevalence of past years of any type of GBV was more than 60% in Latin America and North America, 70% in Europe, and 80% in Africa and Asia[5]. Results from the Global Based School Survey (GBSS) revealed that the magnitude of current physical and sexual violence in five African countries ranged from 27%-50% and 9%-33%, respectively[6,7]. In a systematic review conducted in Africa, it was shown that the prevalence of child abuse was 64%[8].

GBV is currently acknowledged to be a significant global public health concern with severe effects on girls and women, such as increasing the risk of non-communicable diseases and causing reproductive and mental health issues[1-4]. GBV is concomitant with severe health problems for women and their children, including adverse pregnancy outcomes, injuries, gynaecological problems, and STIs. It has direct effects on women's health[9].

GBV hurts a country's economic, human, and social development. Persistent GBV reduces productivity and income, perpetuates generational violence, hinders the promotion of gender equality and the work towards lifting people out of poverty[10]. The underlying causes of GBV are gender inequality and discrimination, which are affected by the historical and structural unequal distribution of power between women and men and are present in fluctuating levels throughout the world[1,11]. GBV is linked to gender inequalities, the absence of power and control, social norms, and the condoning of abuse. Inequalities between men and women occur throughout the entire life of communities. Due to this, women and girls are more vulnerable to being victims, being exploited, and experiencing marital conflict. For instance, economic reliance on men, restrictions, and marginalization under the law are connected with divorce and marriage and child custody disputes[1,12]. The economic impacts of GBV on women, their families, and their communities are through multiple pathways. One pathway includes women having to bear the costs of violence, such as medical care and replacement of broken household goods, and households facing lost time, productivity, and income. For example, reducing women's involvement in formal or care work and social networks[13], to carry out economic activities within the home, or engaging in paid work or training. A second pathway from GBV to poverty is through the impacts of GBV on mental health[14]. These include minimized concentration and productivity at work and absenteeism from work. A third pathway is through women having an unplanned pregnancy[15]. With the limited governmental legislation and support, this increases women's unpaid care work, thereby reducing their ability to work and limiting the kind of work available to them[16].

Research from South Africa, Ethiopia, Eastern Europe, and Central Asia has shown that GBV impacts female students in a school setting because it hinders education, causes severe psychological and educational negative impacts, instigates physical harm, reduces the willingness of students to go to school[17,18], and reduces student achievement at school and home[19,20]. The main perpetrators are intimate partners, family members, employers, co-workers, teachers, and strangers, as well as state officials like police officers, correctional officers, and soldiers[3,21].

In a systematic review conducted in Africa, researchers have identified that the consequences of sexual and physical abuse of adolescents are a higher risk of sexual activity that is risky (unsafe), victimization, HIV infection, transactional sex, compromised physical health, and finally, death[8]. In a few studies done in Ethiopia, researchers stated that GBV has many adverse health outcomes, including unintended pregnancy[22-26], unsafe abortion[22,23,26], unusual vaginal discharge[22-26], sexually transmitted infection, and sexual dysfunction[25]. Moreover, GBV has been linked to mental health problems like suicidal ideation and attempts[22-26], depression[26,27], fear and anxiety, self-blame, low self-esteem, isolation, and feelings of hopelessness[23,24,26]. However, these studies differ in terms of the sampled population and study setting.

As the above studies indicate, GBV has severe consequences on the health of females. However, many of these studies were conducted among college and university students, and few studies reported the consequences of GBV on female high school students in Ethiopia. Also, the majority of these studies lack data on the perpetrators of GBV. Moreover, there are inadequate data on the consequences and

perpetrators of different forms of GBV in Ethiopian schools. Therefore, the present study aimed to investigate the consequences of GBV on female high school students in eastern Ethiopia.

Methods

Study area and period

The study was undertaken in East Hararghe zone, Ethiopia, in December 2018. A descriptive cross-sectional survey was conducted among female students from grades 9-12 and aged 14 to 24 years. Female students who were absent from school during data collection were excluded.

Sample size and sampling technique

The sample size was calculated using a single population proportion formula by considering scientific assumptions and all objectives. As the study was part of a survey conducted to assess GBV among female youths, a large sample size of 1,199 was used. The study used a multi-stage sampling technique. First, the number of schools and students was obtained from the zone education office. In the second stage, five schools were randomly selected from the total number of schools in the zone. In the third stage, classrooms were randomly selected from each grade level, and all students from those classes were invited to participate. The number of subjects to be studied was proportionally distributed to the selected schools according to the population size of the group under study. A total of 1,199 students responded out of 1,241female students were drawn from five randomly selected schools, giving us a response rate of 96.62%.

Data collection tools and variables

Data were collected using pretested self-administered questionnaires. The questionnaires were adapted from the World Health Organization (WHO) Multi-Country Study on Women's Health and Life Events, the Ethiopian Demographic, and Health Survey (EDHS)[28,29] and previous relevant published articles[30,31]. The questionnaire was translated into Afaan Oromo (the regional language) and back into English by independent translators to ensure consistent translation. The questionnaires were revised based on the translations and skipping patterns. The data collectors were all female and qualified health professionals (e.g., nursing, public health, psychiatry) and all spoke the regional language. The survey was undertaken in a separate classroom. The survey took 40-60 minutes to complete.

Measurements

In the questionnaires of a large survey, only women who had experienced any type of GBV (emotional or sexual, or physical violence) were asked about their perceived outcomes of any type of GBV. Women who had not experienced any type of GBV skipped this part and did not complete these questionnaires. The consequences questionnaires were designed only for women who had experienced any type of GBV. The experience of physical, sexual, and emotional violence was measured during their lifetime. Physical, emotional, and sexual violence were measured using six, four, and three items, respectively. If the participant responded 'yes' to at least one item, they were considered to have experienced that type of GBV. All items were measured dichotomously (yes or no). The prevalence of any type of GBV was assessed as the experience of at least one or more acts of emotional or physical or sexual violence[2,31,32]. All consequences of any type of GBV were measured as "Have you experienced any of the following conditions as the result of experiencing any type of GBV (physical or sexual or emotional)?". We only asked women who had experienced any type of GBV about their perceptions of the consequences of any type of GBV. We measured consequences by asking only women who had experienced any type of GBV, using a series of dichotomous (yes or no) questions. Participants could give multiple responses to these questions. Physical health consequences included swelling around the genitalia, unusual vaginal discharge, injury around the genitalia, STIs, unwanted pregnancy, and having an abortion after experiencing any type of GBV. Mental health consequences included self-blame, anxiety/fear, shyness and loss of confidence, hopelessness, attempted suicide, and depression after experiencing any type of GBV. Social consequences included poor school achievement, school absenteeism, withdrawal from school, rejection by family/peers, multiple sexual partners,

alcohol dependency/abuse and sexual dependency/abuse after experiencing any type of GBV[2,33]. We measured perpetrators by asking only women who had experienced any type of GBV who the perpetrator was: boyfriend/husband, family member, relative, teacher, student, stranger, and others. The participants could give multiple responses to this question. Socio-demographic variables, including age in years, educational status (Grade 9, Grade 10, Grade 11, or Grade 12), and childhood residence (urban or rural), were also collected.

Data quality

Three days of intensive training were provided to data collectors and supervisors, with emphasis on the study objectives, sampling methods, tools and data collection methods, ethical issues related to GBV research, details in the information statement, sensitive questions, and data quality assurance. A pre-test was conducted on 5% of the sample size in one of the non-selected schools in East Hararghe. The questions were revised to correct the skipping patterns. Supportive supervision was undertaken during fieldwork by the principal investigator. Study participants were informed about the aims and importance of the study in the information sheet, thereby creating a conducive environment to minimize their concerns as the study touches on sensitive issues. We executed descriptive statistics including frequencies, sorting, and cross-tabulations to check the outliers, inconsistencies, and missing values before data analysis. We also presented the data using tables to check for outliers, logical inconsistencies, and patterns of missing information. Cross-checking of the hard copies and electronic versions of the survey data was also carried out. After we checked the data, variables with missing data due to missing skipping patterns were managed by recoding the missing value to the existing variable. Categories of variables with small cell counts were collapsed into a single category.

Data analysis

The collected data were cleaned and entered into Epi Data version 3.1. The data were analysed using STATA version 16. Descriptive statistics were calculated for the student's socio-demographic variables. The prevalence of any type of GBV was determined separately using a 95% CI. A chi-square test was used to assess the differences between the selected socio-demographic variables and any type of GBV during their lifetime.

Results

Prevalence of any type of GBV (emotional, physical or sexual violence)

A total of 1,199 female students completed the self-administered questionnaires. Most of the respondents (63.2%) were aged 16-19 years, with a mean age of 16.3 years (SD = 1.58). The overall prevalence of at least one of the three forms of GBV during a participant's lifetime was 54.9% (95% CI: 52.1-57.7%). The lifetime prevalence of at least one incident of emotional violence was 45.8% (95% CI: 43.0-48.6%), physical violence was 45.7% (95% CI: 42.9-48.5%), and sexual violence was 32.5% (95% CI: 30.0-35.2%).

Differences in socio-demographic characteristics were observed in all forms of GBV during the participants' lifetime. There were statistically significant differences between the residency of participants who experienced and participants who did not experience emotional, sexual, physical, or any type of GBV in their lifetime ($p<0.001$). There were also statistically significant differences between the educational status of participants who experienced sexual, physical, and any type of GBV ($p<0.001$). Likewise, there were statistically significant differences between the educational status of participants who experienced and participants who did not experience emotional violence in their lifetime ($p<0.024$). However, there were no statistically significant differences between the ages of participants who experienced and participants who did not experience sexual, physical, emotional, or any type of GBV in their lifetime (Table 1).

Types of perpetrators for any type of GBV

The commonly reported perpetrator of emotional violence was a family member (29.8%), a student (20.0%), a boyfriend/husband (16.1%), a stranger (17.4%), a teacher (12.0%) and others (2.8%). The main perpetrator of physical violence was a family member (32.3%), a student (18.5%), a boyfriend/husband (16.5%), a stranger (15.9%), a

Table 1: Differences in any type of GBV over lifetime/ever by age, educational status, and residence

Variable N= 1,199		**Type of GBV Emotional violence**			**Physical violence**			**Sexual violence**			**Any type of GBV**		
		Yes	**No**	**Chi-square**	**Yes**	**No**	**Chi-square**	**Yes**	**No**	**Chi-square**	**Yes**	**No**	**Chi-square**
Age	<=15 (n=402)	192 (35.0)	210 (32.3)	Chi2=0.948 P=0.330	192 (35.1)	210 (32.3)	Chi2=1.031 P=0.310	141 (36.2)	261 (32.3)	Chi2=1.788 P=0.181	223 (33.9)	179 (33.1)	Chi2=0.086 P=0.769
	>15 (n=797)	357 (65.1)	440 (67.7)		356 (65.0)	441 (67.7)		548 (67.7)	249 (63.9)		435 (66.1)	362 (66.9)	
Education	9-10 (n=969)	459 (83.6)	510 (78.7)	Chi2=5.082 P=0.024	472 (86.2)	497 (76.4)	Chi2=18.385 P=0.000	333 (85.4)	636 (78.6)	Chi2=7.777 P=0.005	554 (84.2)	415 (76.7)	Chi2=10.729 P=0.001
	11-12 (n=230)	90 (16.4)	140 (21.5)		76 (13.9)	154 (23.7)		57 (14.6)	173 (21.4)		104 (15.8)	126 (23.3)	
Residence	Urban (n=749)	283 (51.6)	466 (71.7)	Chi2=51.511 P=0.000	283 (51.6)	466 (71.6)	Chi2=50.458 P=0.000	186 (47.7)	563 (69.6)	Chi2=53.829 P=0.000	352 (53.5)	379 (73.4)	Chi2= 0.084 P=0.000
	Rural (n=450)	266 (48.5)	184 (28.3)		265 (48.4)	185 (28.4)		204 (52.3)	246 (30.4)		306 (46.5)	144 (26.6)	

Note: Chi2=chi square; GBV=Gender-based Violence; P=P-value

Table 2: Perpetrators and conditions of experienced physical violence among female students during their lifetime in east Hararghe, eastern Ethiopia, December 2018 (n=548)

Variable	Frequency	Percentage
Perpetrator*		
Boyfriend/husband	88	16.5
Family member	173	32.3
Relative	70	13.1
Teacher	67	12.5
Student	99	18.5
Stranger	85	15.9
Other	14	2.6
Disclosed physical violence to someone		
Yes	135	24.9
No	408	75.2
Missing	8	0.9
If you told someone, what was the response you got from them? (n=135)		
Nothing	46	34.1
Helpful	70	51.9
Don't know	19	14.1
Mechanism of reaction by participants		
Did nothing	186	34.0
Yelled	93	17.0
Ran away	47	8.6
Fought back	79	14.42
Other	3	0.6
Do not know	140	25.6
Consequences of PV (reported)*		
No consequences	308	57.5
Poor school achievement/school failure	100	18.7
Withdrawal from school	48	9.0
Felt disgusted by people	35	6.5
Injury/laceration	34	6.4
Fracture/dislocation	14	2.6
Sustained disability (eye, teeth, ear, etc)	23	4.3
Other	16	3.0

*Multiple responses are possible; PV=Physical violence; items were dichotomized (yes and no) during data collection

relative (13.1%), a teacher (12.5%) and others (2.6%). The majority of perpetrators of sexual violence were well-known to women, including family members (23.6%), boyfriends/husbands (22.3%), students (18.6%), and teachers (15.5%), except strangers were almost 20%.

Consequences for any type of gender-based violence

Physical violence consequences

Among the women who had experienced physical violence during their lifetime, 24.9% disclosed the abuse to someone, and 75.2% did not tell anyone. Among those who had disclosed the physical abuse to someone, the response they received was nothing (34.1%), helpful (51.9%), or do not know (14.1%). Out of the women who had experienced physical violence, they reported a range of reactions, including doing nothing (34.0%), yelling (17.0%), running away (8.9%), fighting back (14.4%), other (0.6%), and do not know (25.6%). Among the women who had experienced physical violence, the reported consequences of physical violence were poor school performance (18.7%), followed by a withdrawal from school (9.0%), and felt disgusted (6.5%). The majority (56%) of the participants reported no consequences (Table 2).

Perpetrators, mechanisms, and the conditions about the women who experienced sexual violence

Among the women who had experienced sexual abuse during their lifetime, most women reported that the incident occurred in the perpetrator's home (36.2%), whereas over 20% of women reported the event occurred in their own home and over 13% at school. Most of the incidents occurred in the evening (29.3%) or late evening (27.7%). Regarding the mechanism used by perpetrators to commit sexual violence, hitting (26.1%), pointing a knife (18.5%), and making the victim drunk (15.1%) were reported. Nearly 39% of the perpetrators were older than the women who had experienced sexual abuse. The vast majority (85.6%) of the women who had experienced sexual abuse did not report the incident to any legal body for the following reasons: feelings of shame (23.2%), being afraid of their parent's reaction (14.2%), afraid of the public reaction (10.3%) and afraid of the perpetrator (8.1%). Half of the women who had experienced sexual abuse (50.7%) reported they did not know what to do (Table 3).

Table 3: Context of sexual violence which occurred among female students during their lifetime in east Hararghe, eastern Ethiopia, December 2018 (n=390)

Variable	Frequency	Percentage
Place of incident*		
At home	81	20.8
At his home	141	36.2
In a hotel	44	11.3
At school	54	13.9
On the way to school	54	13.9
Other	16	4.1
Time of incident		
Morning	70	18.0
Afternoon	98	25.2
Evening	114	29.3
Late evening	108	27.7
Mechanism used by perpetrator to commit sexual assault*		
Hit me	100	26.1
Pointed a knife at me	71	18.5
Pointed a gun at me	50	13.1
Made me drunk	58	15.1
Gave me drugs with alcohol	29	7.5
Smoked drugs on me	15	3.9
Offered me marks to pass exams	44	11.5
Offered me money	30	7.8
Other	26	6.8
Perpetrator*		
Boyfriend/husband	85	22.3
Family member	90	23.6
Relative	35	9.2
Teacher	59	15.5
Student	71	18.6
Stranger	73	19.1
Other	2	0.5
Age of perpetrator		
Same age as me	46	11.8
Older than me	153	39.3
Much older than me	38	9.7
Other	24	6.2
Don't know	129	33.1
Means of escape		
Cried (someone heard and came to see)	55	19.5
Fought back	76	27.0
Told a lie	97	34.4
Other	54	19.2
Missing	108	27.7
Did your family know about the incident?		
Yes	47	12.1
No	343	88.0
Incident reported/applied to legal systems/police		
Yes	56	14.4
No	334	85.6
Reasons for not sharing/reporting*		
Did not know what to do	182	50.7
Felt ashamed	83	23.2
Was afraid of parents' reaction	51	14.2
Was afraid of the public reaction	37	10.3
Was afraid of the perpetrator	29	8.1
Other	11	3.1

*Multiple responses are possible; items are binary (yes or no)

The reported consequences of sexual violence

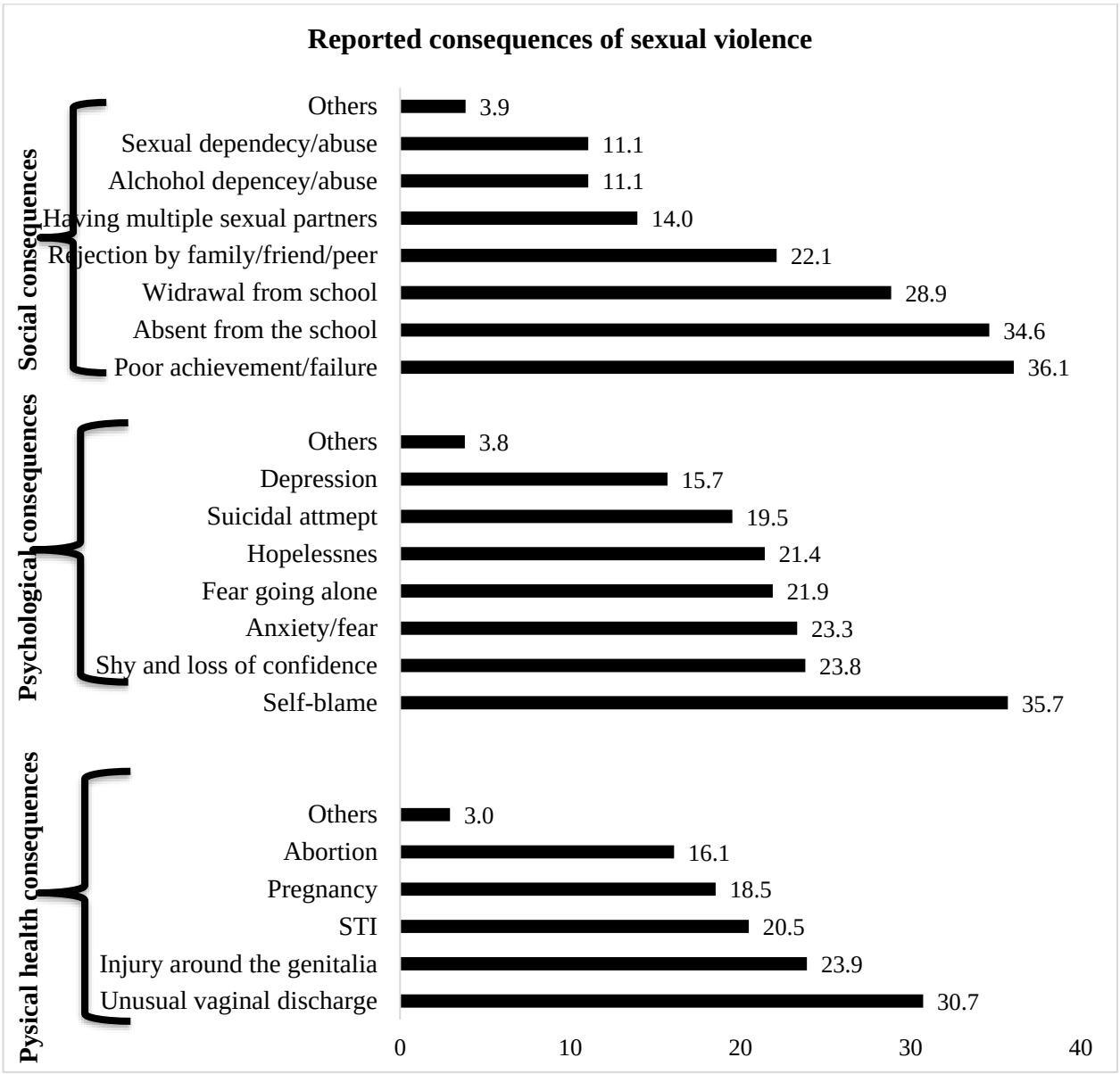
Among the women who had experienced sexual abuse during their lifetime, the reported physical health consequences were swelling around the genitalia (33.7%), unusual vaginal discharge (30.7%), injury around the genitalia (23.9%), STIs (20.5%), unwanted pregnancy (18.5%) and unsafe abortion (16.1%) (Figure 1). Among the women who had experienced sexual abuse the reported psychological health consequences were self-blame (35.7%), anxiety/fear (23.3%), shyness and loss of confidence (23.8%), hopelessness (21.4%), attempted suicide (19.5%), and depression (15.7%) (Figure 1). Among the women who had experienced sexual abuse, the reported social consequences were poor achievement at school (36.1%), absenteeism from school (34.6%), withdrawal from school (28.9%), and rejection by family/peers (22.2%). Others also reported having multiple sexual partners (14.0%), alcohol dependency/abuse (11.1%), and sexual dependency/abuse (11.1%) (Figure 1).

Discussion

The objective of this study was to assess the consequences of GBV on female high school students in eastern Ethiopia. Even though we used a cross-sectional survey, this study documented a high prevalence of different consequences of GBV. It also recorded perpetrators for each type of GBV. The prevalence of any type of GBV in the present study was higher among Grades 9 and 10 students than Grades 11 and 12 students. This may be due to a lack of information about the consequences of GBV.

The prevalence of any type of GBV in the current study was slightly higher among participants who resided in urban areas as children compared to those who resided in rural areas. This difference may be due to rural students feeling uncomfortable about disclosing their experiences of GBV, fear of the public reaction and the taboo surrounding GBV. This may be due to the inadequate awareness of students living in rural areas about GBV. This finding is similar to a previous study conducted among female college students in other parts of Ethiopia[32].

In the current study, the majority of female students were abused by a person known to them, including a family member, a student, a boyfriend/



Note: Participants can answer yes to multiple questions i.e., the percentage may not add up to 100 for each consequence of sexual violence. All items were binary (yes or no) during data collection. The percentage of each item was calculated from the total multiple responses for that consequence. For example, the percentage of abortion was calculated from the total multiple responses to physical health consequences.

Figure 1: Reported outcomes of sexual violence among female students in east Hararghe, Eastern Ethiopia, December 2018 (n=390)

husband, or a teacher. This finding is in line with prior studies[3,23,26,30,34-36]. This may be explained by gender inequality, male dominance, and the low status of women in Ethiopia[36,37]. This suggests that interventions should target family members and schools.

This study found that the majority of women who had experienced sexual abuse did not report the incident to any legal body. The main reasons reported for not disclosing their experiences were feelings of shame, being afraid of their parents' reaction, being afraid of the public reaction, and

being afraid of the perpetrator. This finding is in agreement with a study conducted in other parts of the country[26]. This suggests that encouraging help-seeking behaviours and discouraging cultural and social norms that expose women to GBV is crucial to preventing GBV.

The finding of this study is in consonance with prior studies around the globe; genital discharge/injury[22-25,38], unwanted pregnancy[22,24,25], unsafe abortion[22,23], and acquiring STI symptoms [25] were the physical health outcomes reported by female students who had experienced any type of GBV. This may imply that females who had experienced any type of GBV may be vulnerable to severe reproductive health problems. This suggests that there is a need for sexual education and raising awareness of the consequences of any type of GBV in high schools. This may increase the awareness of youths about comprehensive sexuality education and GBV impacts. In addition, this finding highlights the need for more specialized health services.

The findings of the present study corroborate studies in other parts of the world; it was demonstrated that self-blame, shyness, and loss of confidence, anxiety/fear, hopelessness[23,24,37], attempted suicide[22-25], and depression[27] were common mental health outcomes reported by females who had experienced any type of GBV. This may lead to long-lasting effects. The present finding suggests that counselling services may be helpful to minimize the long-term impacts of any type of GBV. Consistent with other studies, poor academic achievement[17-20], absenteeism, and withdrawal from school, rejection by family/friends, and alcohol and sexual dependency were common educational and social outcomes reported by females who had experienced any type of GBV[2,20,21,25,26,37,39-41]. This suggests that students who have experienced any type of GBV may be vulnerable to poor academic performance and school failure. Combined, the current and past studies demonstrate that improving educational outcomes for female students who have experienced any type of GBV is essential.

Limitations of this study

The current study provides essential information on consequences and perpetrators but is worth noting several limitations. Firstly, this study used a descriptive cross-sectional study, which cannot determine the impact of gender-based violence, instead of relying on self-report. Secondly, respondents may underreport their experiences due to social desirability bias as the study deals with sensitive issues. Thirdly, this study emphasizes the description of consequences but could not see the associations between consequences and any type of GBV due to insufficient data, and the questions for consequences were designed only for participants who had experienced any type of GBV. The future study should investigate health effects and GBV, which comprise both participants who had experienced and who had not experienced any type of GBV among female high school students in Ethiopia.

Conclusion

This study confirms that GBV is a severe public health problem among a sample of female high school students in eastern Ethiopia. The health impacts of GBV reported by the young women who had experienced abuse were severe. It not only affects the health of students but also leads to poor school performance, dropout, repetition of a grade, absenteeism, and reduced interest in school. The findings of this study have implications for interventions; early intervention and support to mitigate long-term adverse impacts of GBV are needed. Urgent attention is needed from education departments, parents, health departments, justice departments, students, and NGOs working with women and children to promote effective prevention and interventions. Raising the awareness of the youth about the consequences of GBV is important to minimize the occurrence of GBV[42-44]. Effective policies to prevent GBV at school must also address GBV in communities and homes. Effective prevention should be targeted at well-known perpetrators and in homes. Comprehensive sexual education, including information regarding STIs, HIV, and AIDS, reproductive health, and consequences of GBV, should be included in school curricula to mitigate the impact on later life[42-44]. The findings of this study may help in designing interventions and decision-making. Moreover, the findings of the current study suggest that schools should establish counselling services, mini-clinics,

and links to other health institutions. A longitudinal study and more cross-sectional surveys are required to investigate GBV among school students in different regions. Future studies should investigate factors associated with the health effects of GBV and the effects of GBV on educational outcomes. The future study should examine the determinants of the help-seeking behaviours among women who had experienced GBV.

Ethical approval

Ethical clearance was obtained from the University of Newcastle, Human Research Ethics Committee (H-2018-0031)**,** and Haramaya University, College of Health and Medical Sciences (IHRERC /137/2018). Official permission in writing was obtained from the Zonal Education Office Representatives, district office, and the selected schools' principals. Information leaflets regarding the research were provided to the participants. Participants Information statement for the research is provided in the envelope. As the study involved a single survey and did not involve the collection of personally identifiable information, the ethics committee recommended that consent would be implied by the completion of the survey. This process would enhance the assurance of anonymity given to the students. Students could decide not to take part by not attending the survey session or not completing a survey within the survey session (by placing a blank or incomplete survey in the provided envelope). Reasons for non-participation or withdrawal were not required, and there were no consequences for participation or non-participation. The study strictly followed the WHO guidelines on ethical issues related to the study of GBV[9,45]. All information obtained from the respondents remained confidential and anonymous.

Competing interests

The authors declare no competing interests.

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Contributions of authors

AB, CC, DL conceptualized and designed the research. AB analysed the data, interpreted the findings, and drafted the manuscript. All authors participated in critically revising the manuscript for relevant intellectual content. All authors read, provided feedback, and approved the final manuscript.

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