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Original Research Article

Knowledge, Attitude and Associated Factors towards Safe Abortion among Female Students of Kebribayah Town of Somali Region, Ethiopia

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ABSTRACT

Background: In Ethiopia, unwanted pregnancy is a big problem. Female at the age of adolescence are vulnerable towards unplanned pregnancies and those mostly end up with unsafe abortion. Likewise, Somali region is known for low potential health service coverage, accessibility and utilization due to culture and pastoralist life style. Therefore, this study is intended on assessing the knowledge, attitude and associated factors towards safe abortion of the female students of adolescent age in kebribayah town of Somali region, Ethiopia.
Methodology: A cross sectional study was conducted on 246 female students(9^{th}-12^{th} Grade)at secondary and preparatory school of kebribayah, Somali region, selected through systematic random sampling. The pre-tested questionnaires were used for data collection. Bivariate and multivariate logistic regression analysis was performed to justify association of dependent and independent variables using SPSS version 20.
Results: Only 51.95% participants had good knowledge and 40.7% had positive attitude towards safe abortion. Participant's residential status and educational level, father's educational status had significant association with knowledge and attitude both. Whereas family monthly income had association only with knowledge towards safe abortion and source of information related to safe abortion was the predictor for attitude development only.
Conclusion and Recommendation: Knowledge and attitude towards safe abortion was inadequate and unsatisfactory. There is an urgent need of information dissemination on reproductive health issues and available health services to the students (irrespective of sex) and community people. Improvement of socioeconomic status of the community and available health services might have a great impact with the knowledge and attitude of unsafe abortion.
Keywords: Safe Abortion, knowledge, attitude, Female students, Somali Region,

INTRODUCTION

Unsafe abortion is defined by the World Health Organization (WHO) as a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards or both. Unsafe abortion is one of the three leading causes of maternal mortality along with haemorrhage and sepsis from childbirth along with thousands of disabilities like reproductive tract infections (RTI), pelvic inflammatory disease and infertility. Each year, approximately 21 million unsafe abortions are performed worldwide. The good news is that death from unsafe abortion worldwide has been dropped, but the population of women dying from unsafe abortion has remain stagnant at 13% (approximately) of maternal death. This increase in number of unsafe abortion without corresponding

increase in rate is mainly due to growing population of women in reproductive age. In particular, two key factors impact unsafe abortion rate: access to contraceptive and to unsafe abortion services. Extensive research showed that behind almost every abortion is an unintended pregnancy. [1] In Eastern Africa, it is estimated that 18% of all maternal deaths are the result of complications of poorly performed abortions. [2] Unsafe abortion is the most common cause of maternal mortality in Ethiopia, accounting for up to 32% of all maternal deaths in the country. [3]

In Ethiopia, last decades abortion was illegal. Currently abortion is legal in Ethiopia under certain preconditions that include cases of rape, incest or foetal impairment, if the pregnancy endangers her or her child's life, or if continuing the pregnancy or giving birth endangers her life. A woman may also terminate a pregnancy if she is unable to bring up the child, owing to her status as a minor or to a physical or mental infirmity. Despite the legalization of abortion with some criteria's, almost 6 out of 10 abortions in Ethiopia are unsafe. [4]

According to Ethiopian Demographic Health Survey data (2016), teenage childbearing is more common in Somali regions (19%). [5] Inadequate information, poor attitude towards safe abortion and lack of motivations results in about half of all pregnancies are unsafe abortion in the country. Different studies at other regions of Ethiopia showed that the knowledge and attitude in relation to safe abortion are limited among women. [6,7] Somali region remained untouched in this regard. But adolescents and young females of Somali region also face particular challenges in accessing and utilization of user-friendly health services and experience high risks of unplanned teenage pregnancy and this result is continuing high maternal and neonatal mortality. So it is important to know the knowledge, attitude, and associated factors towards safe abortion among teenage Somali girls because they are adolescent and sexually active, but more vulnerable to risky sexual practices, less experienced and culturally conservative about safe abortion. The area selected for study was Kebribeyah town of Somali region, because the town was small, less exposure to safe abortion practices and family planning services, culturally conservative and more over having traditional attitude towards abortion. Finally, the study findings will encourage policy makers to pay attention for safe abortion especially for Somali region and to revise of guidelines and mode of delivered services according to the community demand. In addition it may be one input for reconsideration of the curriculum in relation to safe abortion issue particularly in Reproductive health field to access the mass, irrespective of sex.

MATERIALS AND METHODS

Study Design, Setting and participants

School based cross- sectional study was employed from March to May 30, 2017 among girl students studying Grade 9th-12th in Kebribeyah town. This town is located in Somali Region of south eastern Ethiopia, having one secondary and preparatory school (9-12), two elementary school and two heaths Centre (HC). Total number of female students of Kebribeyah secondary and preparatory school studying in standard 9th-12th was 543 in the academic year 2016-17. The girls who attained menarche were included for the study. Girls with visual impairment, critically ill and incapable to provide informed consent were excluded from the study.

Sample size

The sample size was determined using a formula for estimation of single population proportion with the assumption of 95 % confidence interval, 5 % margin of error, and prevalence of knowledge about menstruation at 57%. [8] To compensate for the non-response rate, 10 % of the determined sample was added up on the calculated sample size and the final sample size was found to be 246.

Sampling procedures

Proportional sampling was used based on the number of female students in grade 9^{th} -$12^{th.}$. The list of the students was obtained from the principal office. The predetermined sample size was taken proportional number of students from all grades (by dividing the number of each grade students in to a total of 543 female students then multiplied by the predetermined sample size of 246 females). Then the eligible population was selected by using systematic random sampling technique from each grade. To do this a sample interval was calculated for each grade based up on their total number and their proportional allocation (interval=sample size/source population); which is approximate to 1. After putting their list alphabetically the first student included in the study was selected randomly and then the others were selected after one interval until the sample size was reached.

Data collection procedures

To collect data self-administered questionnaires were employed. Based on early published literature, questionnaires were prepared to fulfill the objectives of the study. At first, the questionnaire was prepared in English language and translated into Somali and Amharic language and then translated back to English by other people who are proficient in both languages to maintain the consistency and content of the questionnaire. Before the actual data collection, the questionnaire was pre tested on 5% of the study subjects at another secondary and preparatory school from neighbouring area. Based on the finding of the pretest, the tool was modified and finally, the Somali and Amharic version questionnaire were self-administered.

Data collection facilitators were two female health professionals from Kebribeyah health center. They were given two days training on the objective of the study and data collection procedure and techniques with pretested questionnaire. The investigator checked the filled questionnaires daily for completeness and consistency.

Students' safe abortion knowledge score was calculated out of the 19 knowledge specific questions. Each correct response earned one point and zero for the incorrect one based on the respondent's response. Finally to categorize the students having "good knowledge" and "poor knowledge", the mean score of knowledge was used to decide the cutoffs of the rank. Based on this, the respondent who scored greater than or equal to the mean score were considered as having "good knowledge" and respondents who scored less than the mean score were considered as having "poor knowledge".

Students' attitude of the students towards safe abortion score was calculated out of eight questions specific questions. The response options were given a value ranging from one to five scales (Likert Scale), i.e., for the first four questions the value was given as strongly agree = 5, agree = 4, uncertain = 3, strongly disagree = 2 and disagree = 1; whereas for the last four questions the direction was reversed due to the nature of the questions, which is strongly agree = 1, agree = 2, uncertain = 3, strongly disagree = 4 and disagree = 5 based on the respondent's response. After calculating a score of each respondent for the eight questions, a mean score of the total respondents was taken as cutoffs of the rank. The respondents with greater than or equals to the mean score were considered as having "positive attitude" and those with less than the mean score were considered as having "negative attitude".

Data processing and statistical analysis

Data were cleaned and entered into a computer using Epi-info Window version 3.5.1 statistical program. Then the data were exported to SPSS Windows version 20.0 for analysis. The descriptive analysis including proportions, percentages, frequency distribution and measures of central tendency was done.

Initially, bivariate analysis was performed between dependent variable

(Knowledge and practice of menstrual hygiene) and each of the independent variables (Socio-demographic variables), one at a time. Their odds ratios (OR) at 95 % confidence intervals (CI) and P-values were obtained, to identify important candidate variables for multivariate analysis. All variables found to be significant at bivariate level (at P-value <0.05) were entered in to multivariate analysis using a logistic regression model in order to control for confounding factors.

Ethical considerations

Ethical clearance and permission was obtained from School of Graduate studies, Jigjiga University as well as Kebribeyah secondary and preparatory school authority. Confidentiality of information was maintained by omitting any personal identifier from the questionnaire. Students were informed of their full right to skip or ignore any question or withdraw from their participation at any stage.

RESULTS

The study was started with 246 participants. Then out of 246; 231 participants were heard about the term safe abortion and 15 were not heard about safe abortion, so those 15 participants were not able to fill the questionnaire properly. Finally 231 completed questionnaires have been considered for results and analysis.

Socio-Demographic Characteristic of the Study Participants

Majority of the respondents (55%) were found to be at the age group of 16-18. The average age of the students was 17.16yrs (± 1.78). Most of the respondents were from urban (71.9%). 87.9% participants were Somali. Muslim religion followers were 90%. Out of the total participants, 30.3% were from grade 9, 25.1% from grade 10, 26.4% from grade 11 and 18.2% were from grade 12. 67.1% participant's mothers were illiterate and 45.5% participant's fathers were illiterate. 91.8% of the students were single according to their marital status. The monthly family incomes of the 47.6% students were less than 1000 Birr (Table 1).

Table 1: Socio demographic characteristics of study participants on safe abortion in Kebribeyah Secondary and Preparatory School, Kebribeyah town, Ethiopian Somali Regional State

Variables		Frequency (n=231)	Percent
Age (in years)	<15	46	19.9
	16-18	127	55
	>19	58	25.1
Place of residence	Urban	166	71.9
	Rural	65	28.1
Ethnicity	Somali	203	87.9
	Oromo	22	9.5
	Amhara	6	2.6
Religion	Muslim	208	90
	Orthodox	16	6.9
	Protestant	7	3
Educational level	Grade 9	70	30.3
	Grade 10	58	25.1
	Grade 11	61	26.4
	Grade 12	42	18.2
Mother's educational status	Illiterate	155	67.1
	Elementary	46	19.9
	High school & above	30	13
Father's educational status	Illiterate	105	45.5
	Elementary	68	29.4
	High school & above	58	25.1
Marital status	Single	212	91.8
	Married	12	5.2
	Divorced	7	3
Monthly income of the family (Birr)	<1000	110	47.6
	1000-3000	73	31.6
	>3000	48	20.8

Results related to Basic pregnancy, abortion and source of information

Out of the total respondents, 96.5% were never been pregnant before and only 3.5%

of them have a history of pregnancy and the outcome of the all those pregnancies were delivery, no previous history of abortion were noted. More than 72% of the students were not interested to be pregnant now and the reasons they highlighted: Still in school (59.3%), Premarital pregnancy leads to stigma (10.8%), Fear of family (20.4%) and Too young to have a child (9.6%) (Table 2). For the most of the participants (35.1%), the information related to safe abortion were informed by friends, followed by family (19.5%), health professional (16.9%), School (16.5%) and by Media (12.1%) (Figure1).

Table 2: Basic pregnancy, abortion and source of information of study participants on safe abortion in Kebribeyah Secondary and Preparatory School, Kebribeyah town, Ethiopian Somali Regional State

Variables	Frequency	
	Yes N (%)	No N (%)
History of pregnancy (n=231)	8 (3.5)	223 (96.5)
Outcome of the pregnancy (n=8)		
➢ Aborted	-	8 (100)
➢ Delivered	8 (100)	-
➢ Now pregnant	-	8 (100)
Planned to become pregnant now (n=231)	64 (27.7)	167 (72.3)
Reason for not wanting to become pregnant now (n=167)		
➢ Still in school	99 (59.3)	68 (40.7)
➢ Premarital pregnancy leads to stigma	18 (10.8)	149(89.2)
➢ Fear of family	34 (20.4)	133 (79.6)
➢ Too young to have a child	16 (9.6)	151 (90.4)
Heard about safe abortion (n=246)	231 (93.9)	15 (6.1)

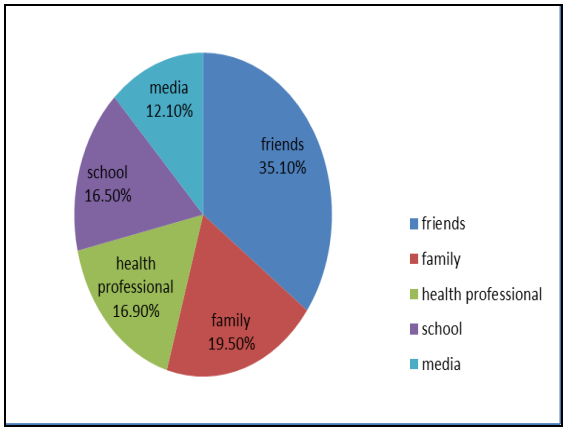

Figure1: Source of information about safe abortion

Participants Knowledge about safe abortion

Unsafe abortion as a major health problem of Ethiopia was considered by50.6% of the participants. The students were asked to identify the possible complications of unsafe abortion: 34.6% mentioned Uterine perforation; for Bleeding 42% said yes; 36.4% said Infection; for Loss of fertility 29.9% participants said yes; 41.5% mentioned Death. The presence of safe abortion service will reduce the risk of women's Reproductive health problem was confirmed by 40.7% study participants. Only 47.6% students were aware about the presence of law for legalization of termination of pregnancy in Ethiopia (Table 3).

The results of obtained from Table-3 revealed that 51.95% of the students were found to have a good knowledge while the remaining (48.05%) had poor knowledge about safe abortion.

Female students from urban area were found to be around twenty eight times more likely to have good knowledge than those were from rural areas [AOR=28.24, 95% CI: 5.88-135.56]. Students of grade eleven [AOR=31.55, 95% CI: 4.38-227.27] and grade twelve [AOR=42.57, 95% CI: 2.92-621.01] were more likely to have good knowledge than those of from studying at grade nine. Girls whose father's education status elementary school and above were 7.04 times more likely had good knowledge about safe abortion than their counterparts [AOR= 7.04. 95 % CI: 2.08—23.87]. Girls from monthly income of the families more than Birr 3000 were more likely to have good knowledge about safe abortion when compared to those students with family monthly income of less than one thousand birr [AOR = 3.81,95 % CI: 1.29-11.14] (Table 4).

Table 3: Knowledge of study participants on safe abortion in Kebribeyah Secondary and Preparatory School, Kebribeyah town, Ethiopian Somali Regional State, 2017

Variables	**Frequency (n=231)**	**Percent**
Time for pregnancy termination		
➢ Before 28 weeks	143	61.9
➢ After 28 weeks	75	32.5
➢ Don't know	13	5.6
Place for pregnancy termination		
➢ Health facility	133	57.6
➢ Don't know	98	42.4
Consider unsafe abortion as a major health problem of Ethiopia		
➢ Yes	117	50.6
➢ No	93	40.3
➢ Don't know	21	9.1
Complications of unsafe abortion		
Uterine perforation		
➢ Yes	80	34.6
➢ No	140	60.6
➢ Don't know	11	4.8
Bleeding		
➢ Yes	97	42
➢ No	126	54.5
➢ Don't know	8	3.5
Infection		
➢ Yes	84	36.4
➢ No	144	62.3
➢ Don't know	3	1.3
Loss of fertility		
➢ Yes	69	29.9
➢ No	94	40.7
➢ Don't know	68	29.4
Death		
➢ Yes	96	41.5
➢ No	121	52.4
➢ Don't know	14	6.1
Safe abortion service will reduce the risk of women's Reproductive health problem		
➢ Yes	94	40.7
➢ No	131	56.7
➢ Don't know	6	2.6
Ethiopia have abortion law for legalizing termination of pregnancy		
➢ Yes	110	47.6
➢ No	84	36.4
➢ Don't know	37	16
Reasons for which abortion is legal in Ethiopian context		
When the pregnancy is resulted due to rape		
➢ Yes	104	45
➢ No	105	45.5
➢ Don't know	22	9.5
when the pregnancy is resulted due to incent		
➢ Yes	92	39.8
➢ No	132	57.2
➢ Don't know	7	3
When pregnancy endangers the health or life of the woman or fetus		
➢ Yes	88	38.1
➢ No	131	56.7
➢ Don't know	12	5.2
For minors who are physically or psychologically unprepared to rise a child		
➢ Yes	79	34.2
➢ No	120	51.9
➢ Don't know	32	13.9
when the woman does not want the child		
➢ Yes	57	24.7
➢ No	140	60.6
➢ Don't know	34	14.7
When pregnancy is the result of extra marital or without marriage		
➢ Yes	66	28.6
➢ No	146	63.2
➢ Don't know	19	8.2
When the woman is financially unable to support the child		
➢ Yes	73	31.6
➢ No	137	59.3
➢ Don't know	21	9.1

Table 3 to be continued…		
In case of fetal impairment		
➢ Yes	76	32.9
➢ No	142	61.5
➢ Don't know	13	5.6
For women with physical/mental Disabilities		
➢ Yes	87	37.7
➢ No	128	55.4
➢ Don't know	16	6.9

Table 4: Bivariate and Multivariate analysis to Identify Predictors of knowledge towards safe abortion among female students of Kebribeyah Secondary and Preparatory School, Kebribeyah town, Ethiopian Somali Regional State

Variables	Category	knowledge level		COR (95 % CI)	AOR (95 % CI)
		Good (n=120)	Poor (n=111)		
Age	<15	13 (10.8)	33 (29.7)	1	1
	16-18	74 (61.7)	53 (47.7)	3.54 (1.70, 7.37)*	1.45 (0.46, 4.82)
	>19	33 (27.5)	25 (22.5)	3.51 (1.45, 7.65)*	1.05 (0.15, 7.34)
Residence	Rural	22 (18.3)	43 (38.7)	1	1
	Urban	98 (81.7)	98 (83.3)	2.82 (1.55, 5.13)*	28.24 (5.88, 135.56)*
Educational level (grade)	Grade 9	24 (20)	46 (41.4)	1	1
	Grade 10	27 (22.5)	31 (27.9)	1.67 (0.82, 3.41)	0.62 (0.16, 2.43)
	Grade 11	46 (38.3)	15 (13.5)	5.88 (2.74, 12.61)*	31.55 (4.38, 227.27)*
	Grade 12	23 (19.2)	19 (17.1)	2.32 (1.06, 5.08)*	42.57 (2.92, 621.01)*
Fathers educational status	Illiterate	34 (28.3)	71 (64)	1	1
	Elementary	44 (36.7)	24 (21.6)	3.83 (2.01, 7.23)*	7.04 (2.08, 23.87)*
	High school & above	42 (35)	16 (14.4)	5.48 (2.71, 11.11)*	0.84 (0.22, 3.18)
Income of family/month	<1000	42 (35)	68 (61.3)	1	1
	1000-3000	41 (34.2)	32 (28.8)	2.07 (1.34, 3.79)*	0.76 (0.26, 2.21)
	>3000	37 (30.8)	11 (9.9)	5.45 (2.51, 11.82)*	3.81 (1.29, 11.14)*
Source of information	Media	17 (14.2)	11 (9.9)	1	1
	Family	26 (21.7)	19 (17.1)	0.89 (0.34, 2.32)	0.87 (0.24, 3.18)
	Health professional	12 (10)	27 (24.3)	0.29 (0.10, 0.81)*	0.41 (0.10, 1.56)
	Friend	49 (40.8)	32 (28.8)	0.99 (0.41, 2.39)	2.71 (0.64, 11.47)
	School	16 (13.3)	22 (19.8)	0.47 (0.17, 1.27)	0.82 (0.20, 3.36)

*statistically significant at P<0.05

Participants Attitude about safe abortion

To assess the attitude of students towards safe abortion eight statements were raised and five options were provided for each of these statements: 'strongly agree', 'agree', 'uncertain', 'disagree' and 'strongly disagree'. For the statement: 'Safe and voluntary abortion should be legal and accessible' -31.2% participants strongly agreed. Next statement: 'A woman should have the right to decide for herself whether or not to have an abortion', 23.8% supported strongly. For the statement: 'Women who get an abortion should not be ashamed of their decision'- 26.8% participants not supported strongly. For the statement: 'Women who get an abortion are not selfish and are concerned about others'- 34.2% students disagreed strongly. Next Statement: 'Legal induced abortion is equivalent to murder'- 41.4% respondents agreed strongly. For the statement: 'All women who undertake safe abortion will have fertility problems later in life'- 29.4% were uncertain and 28.1% students not supported. Next statement: 'All women who undertake safe abortion will suffer negative mental health effects' -34.6% participants strongly agreed. Last statement: 'All women who undertake safe abortion are at higher risk for breast cancer and other health problems'-28.1% respondents supported strongly (Table 5).

The results obtained from the Table-5 revealed that 40.7% of the students were found to have a positive attitude towards safe abortion while the remaining (59.3%) had negative attitude towards safe abortion.

Students from urban areas were found to be around twenty nine times more likely to express positive attitude than those who were from rural areas (AOR=29.92, 95% CI: 3.63-246.81). Students of grade twelve were more likely to be in favor of safe abortion than those of grade nine students, (AOR=87.08, 95% CI: 4.28-177.37). Moreover, fathers educational status of elementary level had shown the

attitude of students to be positive around eight times (AOR=8.42, 95% CI: 2.51-28.28) more likely than those whose fathers were illiterate and students who heard about safe abortion from health professionals had shown a tendency of being against safe abortion than those who heard from media (AOR=0.14, 95% CI: 0.04-0.54) (Table 6).

Table 5: Attitude of study participants towards safe abortion in Kebribeyah Secondary and Preparatory School, Kebribeyah town, Ethiopian Somali Regional State

Statements	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree
Safe and voluntary abortion should be legal and accessible	72 (31.2%)	22 (9.5%)	25 (10.8%)	41 (17.8%)	71 (30.7%)
A woman should have the right to decide for herself whether or not to have an abortion.	55 (23.8%)	39 (16.9%)	32 (13.9%)	55 (23.8%)	50 (21.6%)
Women who get an abortion should not be ashamed of their decision	59 (25.5%)	35 (15.2%)	29 (12.6%)	46 (19.9%)	62 (26.8%)
Women who get an abortion are not selfish and are concerned about others	61 (26.4%)	33 (14.3%)	21 (9.1%)	37 (16%)	79 (34.2%)
Legal induced abortion is equivalent to murder	95 (41.1%)	32 (13.9%)	10 (4.3%)	27 (11.7%)	67 (29%)
All women who undertake safe abortion will have fertility problems later in life	58 (25.1%)	11 (4.8%)	68 (29.4%)	65 (28.1%)	29 (12.6%)
All women who undertake safe abortion will suffer negative mental health effects	80 (34.6%)	43 (18.6%)	14 (6.1%)	31 (13.4%)	63 (27.3%)
All women who undertake safe abortion are at higher risk for breast cancer and other health problems	65 (28.1%)	50 (21.7%)	22 (9.5%)	46 (19.9%)	48 (20.8%)

Table 6: Bivariate and Multivariate analysis to identify predictors of Attitude towards safe abortion among female students of Kebribeyah Secondary and Preparatory School, Kebribeyah town, Ethiopian Somali Regional State

Variables	Category	Attitude level			
		Positive (n=94)	Negative (n=137)	COR (95 % CI)	AOR (95 % CI)
Age	<15	12 (12.8)	34 (24.8)	1	1
	16-18	55 (58.5)	72 (52.6)	2.12 (1.03, 4.56)*	0.51 (0.13, 1.94)
	>19	27 (28.7)	31 (22.6)	2.47 (1.07, 5.71)*	0.31 (0.04, 2.36)
Residence	Rural	15 (16)	50 (36.5)	1	1
	Urban	79 (84)	87 (63.5)	3.03 (1.58, 5.81)*	29.92 (3.63, 246.81)*
Educational level (grade)	Grade 9	19 (20.2)	51 (37.2)	1	1
	Grade 10	26 (27.7)	32 (23.4)	2.18 (1.04, 4.56)*	1.23 (0.31, 5.44)
	Grade 11	26 (27.7)	35 (25.5)	1.99 (0.96, 4.14)	3.45 (0.51, 23.42)
	Grade 12	23 (24.5)	19 (13.9)	3.25 (1.45, 7.26)*	87.08 (4.28, 177.37)*
Mothers educational status	Illiterate	50 (53.2)	105 (76.6)	1	1
	Elementary	26 (27.7)	20 (14.6)	2.73 (1.39, 5.35)*	1.74 (0.67, 4.54)
	High school & above	18 (19.1)	12 (8.8)	3.15 (1.41, 7.04)*	1.81 (0.51, 6.38)
Fathers educational status	Illiterate	23 (24.5)	82 (59.9)	1	1
	Elementary	42 (44.7)	26 (19)	5.76 (2.94, 11.29)*	8.42 (2.51, 28.28)*
	High school & above	29 (30.9)	29 (21.2)	3.57 (1.79, 7.12)*	1.62 (0.38, 6.84)
Income of family/month	<1000	33 (35.1)	77 (56.2)	1	1
	1001-3000	32 (34)	41 (29.9)	1.82 (0.98, 3.37)	2.75 (0.92, 8.12)
	>3000	29 (30.9)	19 (13.9)	3.56 (1.76, 7.23)*	2.31 (0.85, 6.29)
Source of information	Media	17 (18.1)	11 (8)	1	1
	Family	23 (24.5)	22 (16.1)	0.68 (0.26, 1.76)	0.57 (0.17, 1.85)
	Health professional	8 (8.5)	31 (22.6)	0.17 (0.06, 0.51)*	0.14 (0.04, 0.54)*
	Friend	32 (34)	49 (35.8)	0.42 (0.18, 1.02)	0.29 (0.07, 1.14)
	School	14 (14.9)	24 (17.5)	0.38 (0.14, 1.03)	0.59 (0.16, 2.16)

*statistically significant at P<0.05

DISCUSSION

Unsafe abortion is not only a medical problem but also a social problem. The present study revealed that 51.95% of the students were found to have a good knowledge and positive attitude towards safe abortion were observed among only 40.7% of the participants. Almost similar observation noted by the study conducted among first year students of Mekelle University, Ethiopia on 2015, 55.9% study participants had in adequate knowledge and 52.8% students had positive attitude towards safe abortion. [6] Some changes in attitude level of Somali region data may be due to cultural beliefs and socioeconomic status. In present study, the following variables like residence, educational level (grade), fathers' educational status, income of the family had significant association with knowledge

towards safe abortion. Students who came from rural areas were less likely to have positive attitude towards safe abortion than urban residents. This finding is also supported by the study conducted in Mekelle University as well as study conducted by University of Kentucky. [6,9] Students from educated families were likely to have adequate knowledge. This was supported by a study conducted in University of Buenos Aires, Argentina which revealed the level of education of their parents, 27.8% of their mothers and 34.4% of their fathers had completed their university and had strong association with knowledge of students towards safe abortion. [10] Family educational level has been established as a predictor towards knowledge by the study conducted at Mekelle University. [6] In present study, monthly family income is one of the predictor for development of knowledge towards safe abortion. Similar observation noted by the researchers with a study conducted in university of Buenos Aires, Argentina. [10] Educational level of the study participants is also another variable significantly associated with knowledge in present study. It has been observed that Mekelle University, first year students [6] knowledge towards safe abortion were less than Lagos, Nigeria study [11] subjects, who were studying first year and above. It is fact that as the year of study increases the level of knowledge of students also increased. [12] In contrast, according to Sisay(2015), [8] sex and age had significant relationship with knowledge of safe abortion, which is dissimilar with the current findings.

In present study, attitude towards safe abortion had significant association with following factors like residence, educational level (grade), fathers' educational status and source of information for safe abortion. Students who came from rural areas were less likely to have positive attitude towards safe abortion than urban residents. This finding is also supported by the studies conducted in Mekelle University and University of Kentucky. [6,9] Levels of education of the study participants were significantly associated with attitude toward induced abortion. Similar findings reported by Sisay (2015). [8] In contrast, another study conducted by Ellen et al (2014) on Brazilian adolescent, reported that there were no significant attitudinal differences by gender, age, sexual debut, and maternal education, exposure to sexual education, contact with health providers, internet use, or socioeconomic status. [13] Even, gender and religion have been seen to have significant influence on the attitudes of Nigerian University students towards abortion, which is dissimilar to present study; whereas age, marital status, ethnicity do not have influence on the attitudes of University students towards abortion, which is similar with the current findings. [14]

CONCLUSION

From this study finding, we can conclude that abortion is not prevalent among female adolescent participants in the study area may be due to cultural inhibitions, even most of them are familiar with the term safe abortion. Though, Ethiopia has achieved significant progress since the revised liberalized law, till knowledge and attitude towards unsafe abortion remains inadequate and unsatisfactory in the study area. This could be attributable to socioeconomic status, cultural belief and the problem of information dissemination. School health programs have to be considered and redesigned and attention must be given for the students, irrespective of male/female students on reproductive health issues. Governments as well as Non-government organization along with mass media have to target community, specially the most respectable community elders and religious leaders; to develop positive knowledge and attitude towards safe abortion by providing guideline and information of reproductive health related issues and make services acceptable by not disturbing the cultural beliefs. Improvement of socioeconomic status of the community might have a great

impact with the practice of unsafe abortion. To prevent maternal mortality and morbidity, Safe abortion needs special attention by the researchers and medical practitioners also. Finally, it has to be remember that unsafe abortion endanger the security of entire household and children's well-being when their mother will be died or disabled. Country's economic loss can be prevented by incorporating the facilities like access family planning services, provision of safe abortion care and promotion of emergency post abortion care in case of unsafe abortion along with existing maternal-child malnutrition combating programs and policies.

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