

Knowledge, Attitude and Practice towards Induced Abortion and Associated Factors among Female students in Yebu Secondary School, Jimma zone, South West Ethiopia



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Submission: June 01, 2018; **Published:** July 10, 2018

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Abstract

Background: Induced abortion is considered to be the intentional termination of pregnancy before the fetus can live independently which might be in unsafe manner. Unsafe abortion is one of the three leading causes of maternal mortality globally. In Africa, unsafe abortion accounts for more than a quarter of causes for maternal deaths. Ethiopia is one of the east African countries with highest incidence of unsafe abortion.

Objective: The main objective of this study was to assess knowledge, Attitude and Practice of female students at Yebu secondary school towards induced abortion and associated factors.

Method: Cross-sectional study was conducted in Yebu secondary school female students from May to June, 2016. The students were selected by systemic random sampling technique. The data was collected using self-administered questionnaires. The data was entered and analyzed using SPSS software. Chi-square (χ^2) test was used to look for association of variables.

Results: More than half, 110 (55.5%), of respondents knew at least one methods of abortion and 188 (94.9%) of them knew at least one type of abortion complication. From the total respondents 32 (16.2%) of them had sexual intercourse at least once. Only 5(2.5%) of respondents had induced abortion before. Marital status and family income has statistical association with knowledge towards induced abortion.

Conclusion: More than 70% of the respondents were lacking knowledge and had negative attitude towards induced abortion. Therefore, it would be better to disseminate health education to increase awareness and knowledge regarding induced abortion.

Keywords: Induced abortion; Maternal mortality; Female students; Jimma zone; Ethiopia; Unsafe abortion; Cross-sectional; Fetus; Adolescent girls; Single women; Infertility; Pelvic inflammatory disease; Morbidity; Inclusion criteria; Exclusion criteria; Population; Random sampling technique; Socio-demographic; Sexual practice; Condom; Sexual partner; Chi-square (χ^2) test

Abbreviations: WHO: World Health Organization; RTI: Reproductive Tract Infections; JUSRP: Jimma University Student Research Programme

Introduction

Induced abortion is considered to be the intentional termination of a pregnancy before the fetus can live independently. Induced abortion may be commenced voluntarily based on a woman's personal choice due to various reasons or it may be commenced in-order to preserve the health or save the life of a pregnant woman [1]. Different studies showed that most induced abortions takes place in unsafe manner. Based on World Health

Organization (WHO) definition unsafe abortion is a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not comply with minimal medical standards or both [2]. Abortion is the major reproductive problem that affects all women of reproductive age group especially young women and adolescent girls who may prefer induced abortion than other

ways. Unsafe abortion is more common among single women, teenagers, students and factory workers [3]. It is confirmed that unsafe abortion has been one of the three leading causes of maternal mortality along with hemorrhage 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 with a number of negative consequences [2].

World health organization (WHO) estimates revealed that about 25.0% of all pregnancies globally end in induced abortion, which means approximately 50 million each year. Of these abortions, about 20 millions are being performed under dangerous conditions, either by untrained providers or using unsafe procedures, or both [4]. Globally, the commonly reported reason for having an induced abortion is to postpone child birth. The other factors identified are socio economic concerns including disruption of education or employment, lack of support from family, desire to provide schooling for existing children, poverty, unemployment or inability to afford additional child [5]. Even if maternal mortality declined over the past two decades, it has been a serious global problem and unsafe abortion is unquestionably one of the main causes of maternal mortality. Complications from unsafe abortion accounted for estimated 13% of all maternal deaths worldwide in both years. In United States alone legally induced abortion contributed for 0.6 death /100,000 [2]. In developing countries, attitudes are often negative (rejection) and the treatment of abortion complications is delayed, providing evidence of a non-acceptability to health professionals of treating women admitted for abortion complications. Deaths as a result of unsafe abortions in developing countries are estimated at 80, 000 annually, i.e. 400 deaths per 100, 000 abortions. Although over the past 10 years there have been improvements in the safety of the abortion procedures used and access to treatment for complications for some women in developing countries, the number of women requiring treatment for serious complications of unsafe abortion remains very high and many women never receive care at all [4].

Guttmacher institute 2012 of estimated 40 million abortions take place annually in developing country; many are unsafe and result in serious complications. Half of the abortion in the world are unsafe and nearly all unsafe abortion (98%) occur in developing. 56% of all abortion in developing country are unsafe. In 2008 alone 38 million abortions were performed in developing countries [3]. Failure to recognize the cause and the consequences of unsafe abortion takes greatest toll on developing countries women, because all most all maternal death from unsafe abortion takes place in developing countries [6]. Ethiopia is one of the east African countries with highest incidence of unsafe abortion. In Africa different studies indicate unsafe abortion accounts for more than a quarter of causes of maternal deaths. The burden of unsafe abortion on women, their families and communities and all the limited resources

of the Ethiopian health system are enormous. It is also the leading cause of maternal mortality and morbidity. Despite all effort to promote modern family planning in service Ethiopia demonstrate alarming increase in incidence of unwanted pregnancy, incomplete and septic abortions particularly among adolescents [1].

To undertake appropriate intervention regarding problems associated with induced abortion it is important to have adequate baseline data. However, there was no study conducted before which reveal the status of knowledge, attitude and practice towards induced abortion among Yebu secondary school female students. Therefore, this study would be carried out to assess knowledge on induced abortion, attitudes towards induced abortion and abortion law and their previous practice. The study would provide base line information for further study on the problem and feasible recommendation would be given for stakeholders who had been involved in this sector.

Methods

Background

This study was conducted in Yebu secondary school from May to June, 2017. Yebu secondary school is found in Yebu town which is about 25 km away from Jimma town on the way to Agaro. The town has one high school with a total number of 418 female students and one health center. Yebu town is the capital city of Manna woreda of Jimma zone with a climate of Woinadega and altitude of 1600-1700 m above sea level.

Study design

A cross-sectional study was conducted to assess knowledge, attitude and practice of female students towards induced abortion in Yebu Secondary School, Jimma zone, South West Ethiopia.

Study population

The study populations for this study were all sampled female students who were following their education at Yebu secondary school.

Inclusion and exclusion criteria

All female students aged 15 years and above were included in this study. Whereas female students transferred from other school in second semester were excluded from this study.

Sample size determination

To determine the sample size the 95% level of confidence, 5% margin of error and proportion of (P=50%) were used. Based on this assumption, the actual sample size for the study was calculated using single population proportion formula. Since the total population was less than 10,000, where the total number of female students was 418, correction formula was used to calculate the actual sample size. Finally, the total sample size including the non response rate was decided to be 220 female students.

Sampling technique

A stratified systemic random sampling technique was used to select appropriate sample. First the students were stratified by their grade and the same grade of different shifts was combined together. Then the required sample was taken from each stratum proportional to their size. From each stratum students were selected using systematic random sampling technique.

Data collection procedure

The data collection tool used in this study was self administered questionnaire. The data was collected by trained health officer intern students using. Sampled students from each class were informed about the confidentiality of the study while distributing and collecting questionnaires.

Study variables

The dependent variables in this study were knowledge, attitude and practice of female students towards induced abortion. Whereas socio-demographic condition of respondents, history of sexual practice, condom use and number of sexual partner are some of the independent variables.

Operational definitions

Induced abortion: Interference with provable concepts with the aim of termination of pregnancy

Unsafe abortion: Abortion technique that lack or inadequate skill of provider, hazardous technique and unsanitary conditions.

Knowledge: In this study knowledge used for explaining awareness of students about induced abortion.

Attitude: In this study attitude was used to describe the views of students towards induce abortion.

Practice: Practice used to describe any experience of abortion among female students included in this study.

Knowledge scores: In this study “Good knowledge” represents that respondents who answered 70% and above of the statement on knowledge questions, while “Poor knowledge” represents those who answered below 70% of the statement on knowledge questions

Attitude scores: In this study “Favorable (positive)” attitude was for those who answer 70% and above of the statement on

attitude, whereas “Unfavorable (negative)” attitude was for those who answer below 70% of the statement on attitude.

Data analysis

Collected data was cleaned, edited and checked for completeness and consistency. The data was processed using SPSS software. To look for association of socio demographic characteristics with knowledge, attitude and practice of respondents chi-square (χ^2) test was used ($P < 0.05$). The final result was presented by frequency tables and graphs.

Data quality assurance

The principal investigators made routine and onsite supervision for the completeness and consistency of data collected by each data collectors. All materials used for data collection was arranged sequentially. Training was given for data collectors and supervisors prior to actual data collection time.

Ethical consideration

Formal letter was written from Jimma University student research programme (JUSRP) to Yebu secondary school in order to conduct the study. The objective of the study was discussed with the students and staff members to obtain desired cooperation. In addition to this, willingness of the school members was requested to give necessary information during data collection. Consent from female students was obtained orally and they were informed regarding confidentiality of any information.

Results

Out of the total, 220, estimated sample size, 198 respondents had finished the provided questionnaire completely. Nine (9) questionnaires were discarded because of inconstancy and incompleteness, while 13 students were refused to participate in the study. Hence the response rate in this study was 90%.

Socio-demographic characteristics of respondents

Majority, 196 (98.9%), of respondents were found in the age range of 15-19 years. Regarding religion almost all, 193 (97.5%), of them were Muslims. Majority, 195 (98.5%), of the respondents were single and 194 (96.0%) of them were found to be Oromo Ethnic group. Majority, 194 (98.0%), of respondents have family with income level of below 2950 birr per month (Table 1).

Table 1: Socio-demographic characteristics of female students in Yebu secondary school, Jimma Zone, South West Ethiopia, 2016 (n=198).

Variables	Category	Frequency	Percentage (%)
Age group (in years)	15-19	196	98.9
	20-24	2	1.1
Religion	Muslim	193	97.5
	Protestant	3	1.5
	Orthodox	2	1
Marital status	Single	195	98.5
	Married	2	1
	Divorced	1	0.5

Ethnicity	Oromo	194	98
	Amhara	2	1
	Tigre	1	0.5
	Dawuro	1	0.5
Grade	Grade -9	134	67.7
	Grade -10	64	32.3
Family Income	<2950 birr/month	194	98
	>2950 birr/ month	4	2

Knowledge of respondents on induced abortion

From the total study participants more than half, 110 (55.5%), of them knew at least one method of abortion. Majority, 188 (94.9%), of the respondents knew at least one type of complication of abortion and most, 80 (40.4%), of them

described hemorrhage (bleeding) as one of the complication which might cause due to unsafe abortion. Only 29 (14.6%) of respondents were aware about the legal status of abortion in Ethiopia (Table 2).

Table 2: Knowledge about induced abortion among female students in Yebu secondary school, Jimma Zone, South West Ethiopia, 2016 (n=198).

Variable	Category	Frequency	Percentage (%)
Heard about method of abortion	Yes	110	55.5
	No	88	44.5
Methods of abortion repliedby respondents	Done with medical instrument (n=198)	86	43.4
	Done with metallic instrument (n=198)	130	65.6
	Done with metallic object (n=198)	39	12.7
	Done with plastic tube (n=198)	50	25.3
	Done with local herbs (n=198)	13	6.6
Know the legal status of abortion in Ethiopia	Yes	29	14.6
	No	169	85.4
Do you know abortion complication	Yes	188	94.9
	No	10	5.1
	Infection (n=198)	50	25.3
Knowledge of complication due to unsafe abortion	Hemorrhage (n=198)	80	40.4
	Tetanus (n=198)	10	5.1
	Infertility (n=198)	20	10.1

Overall Knowledge score towards induced abortion and associated factors

Twelve (12) questions were prepared to assess overall knowledge of respondents towards induced abortion. Accordingly, only 18 (9.1%) of students had good knowledge on induced abortion. On the contrary majority, 180 (90.9%), of them

had poor knowledge regarding induced abortion. According to the finding marital status of respondents (P=0.00), and income status of students' family (P=0.000) were found to be statistically significant with overall knowledge of respondents towards induced abortion. The other factors including grade of students (P=0.337) and their religion (P=0.364) were not associated with their knowledge towards induced abortion (Table 3).

Table 3: Predictors of knowledge score towards induced abortion among female students in Yebu secondary school, Jimma Zone, South West Ethiopia, 2016 (n=198).

Variables	Category	Knowledge Score		(χ ²) Chi square	P-Value
		Poor	Good		
Grade	Grade 9	120	14	χ ² =0.92, Df=1	0.337
	Grade 10	60	4		

Religion	Muslim	174	19	$\chi^2=2.02, Df=2$	0.364
	Protestant	2	1		
	Orthodox	2	0		
Marital status of students	Single	189	6	$\chi^2=35.1, Df=2$	0
	Married	1	1		
	Divorced	0	1		
Family income status	<2950 birr/month	188	6	$\chi^2=22.1, Df=1$	0

Attitude of respondents towards induced abortion

Most, 110 (55.6%), of respondents were disagreed with legalization of abortion in Ethiopia. Majority, 166 (83.8%), of them agreed as abortion has complication and 160 (80.8%)

responded that abortion shouldn't done everywhere. The finding also showed that 134 (67.7%) of the respondents disagreed that women should decide herself to abort or not, not her family or clinician (Table 4).

Table 4: Attitudes toward induced abortion among female students in Yebu secondary school, Jimma Zone, South West Ethiopia, 2016.

Attitude	Agree		Undecided		Disagree	
	No	%	No	%	No	%
Abortion should be legalized in Ethiopia	80	40.1	8	4.3	110	55.6
Abortion has no complication	31	15.7	9	4.5	158	79.8
Abortion can kill because of its complications	166	83.8	14	7.1	18	9.1
Abortion should be done every where	34	17.2	4	2	160	80.8
Un wanted pregnancy should be aborted	141	71.2	2	1	55	27.8
There is no difference between abortion done in health institution and by traditional practitioners	30	15.2	8	4	166	80.8
Contraceptive cannot prevent un wanted pregnancy	45	22.7	7	3.6	146	73.7
Pregnant women should decide to abort or not but not her family and clinicians	57	28.7	7	3.6	134	67.7
Using contraceptive cannot prevent un wanted pregnancy that result in induced abortion.	46	23.2	14	7.1	138	69.7

Overall attitude score of students towards induced abortion and its associated factors

A total of 10 questions were prepared to assess the overall attitude of respondents towards induced abortion. Based on the calculated attitude score, majority 152 (76.8%) of respondents

had negative attitude towards induced abortion. The finding revealed that the attitude of the students toward induced abortions was not showed statistically significant association with any variables including religion, marital status and their grade (Table 5).

Table 5: Predictors of attitude score towards induced abortion among female students in Yebu secondary school, Jimma Zone, South West Ethiopia, 2016.

Variables	Category	Attitude Score		(χ ²) Chi-Square	P-Value
		Unfavorable	Favorable		
Grade	Grade 9	14	120	$\chi^2=0.924, Df=1$	0.337
	Grade 10	4	60		
Religion	Muslim	94	99	$\chi^2=0.382, Df=2$	0.826
	Protestant	2	1		
	Orthodox	1	1		

Marital status	Single	77	118	$\chi^2=2.84, Df=2$	0.242
	Married	0	2		
	Divorced	1	1		
Heard about induced abortion	Yes	16	2	$\chi^2=1.410, Df=1$	0.234

Practice of respondents on induced abortion

Among the respondents 32 (16.2%) had sexual intercourse at least once before data collection time. Among those who experienced sexual intercourse before, 28 (87.5%) of them used family planning. Eleven (34.4%) of them used condom while they had sex and 6 (54.5%) of them used condom to prevent pregnancy, HIV/AIDS and other STIs. Reasons for induce

abortion includes still in school (40.0%) and fear of cost to raise children (20.0%). Among those who experienced sexual intercourse 5(15.6%) of them had induced abortion. From those who had induced abortion, 3(60%) of them were induced abortion by health professionals and the rest 2 (40%) were induced by non health professionals. Modern medicine was used by most, 3(60.0%), students to induce abortion (Table 6).

Table 6: Practice of female students towards induced abortion in Yebu secondary school, Jimma Zone, South West Ethiopia, 2016.

Variable	Category	Frequency	Percentage (%)
Had sex previously	Yes	32	16.2
	No	166	83.8
Used any of family planning after sex (n=32)	Yes	28	87.5
	No	4	12.5
Contraceptive type used by respondents (n=28)	Pills	4	14.3
	Injectable	10	35.7
	Condom	11	39.3
	Implants	1	3.6
	Others	2	7.1
Reason for condom use(n=11)	Prevention of pregnancy	2	18.2
	Prevention of pregnancy, HIV/AIDS and STI	6	54.5
	Prevention of HIV/AIDS alone	1	9.1
	Prevention of pregnancy and HIV/AIDS	2	18.2
Had induced abortion (n=32)	Yes	5	15.6
	No	27	84.4
Reason for induced abortion (n=5)	Unmarried (single)	1	20
	Still in school	2	40
	High cost to raise children	1	20
	Disagreementwith husband	1	20
Who induced abortion (n=5)	Health professional	3	60
	Non health professional	2	40
What material was used to induce abortion (n=5)	Modern medicine	3	60
	Plastic tube	1	20
	Local herbs	1	20

Discussion

The World Health Organization (WHO) estimates that every year, nearly 5.5 million African women have an unsafe abortion [7]. To minimize this burden associated with unsafe abortion it is important to legalize abortion which might enhance the provision of quality service. In addition to this improving the knowledge, attitude and practice of females towards safe abortion is critical. This study was intended to assess the

knowledge, attitude, practice of female students towards induced abortion and associated factors. This study showed that 94.9% of study participants were aware of at least one type of complication due to induced abortion. The most commonly cited complications include, bleeding (40.4%), infection (25.3%) and infertility (10.2%). This finding was nearly coherent with a finding obtained in Kampala, Uganda, where most (93.1%) of participants knew at least one complication of an induced

abortion [8]. The variation might be occurred due to difference in access to health information in different settings. Majority of the respondents 55.6% opposed legalization of abortion in Ethiopia. This finding was lower from the study conducted in Jimma where 67% of study participants opposed its legalization [9]. On the contrary the result was much higher than a study conducted in Argentina among college students where only 4.6% of study participants opposed the legalization of induced abortion [10]. The reason why most respondents opposed might be religion and cultural factors which has its influence on one's attitude. Regarding the decision to be made to abort pregnancy, 32.3% of the respondents believed that the right of abortion was the woman's herself rather than her family or clinician.

The finding of this study showed that, from total respondents participated in this only 23.2% of them had showed a positive attitude towards induced abortion. This finding was higher than a finding obtained in Chelia Woreda, Oromia Region, where only 11.4% of respondents had positive attitude towards induced abortion [11]. The legal status of abortion would be a key determinant of access to safe abortion. However, in this area the proportion of individuals who had adequate awareness about legalization of induced abortion was low. According to the finding of this study only 29 (14.6%) of students know the legal status of induced abortion in Ethiopia. This study was found to be much lower than a result obtained in Nepal among medical college students where satisfactory proportions (66.5%) of the respondents were aware about legalization of abortion with in the country [12]. This might be attributed to the difference in level of education among students in two study areas. This study identified that among the respondents who experienced sex, 87% of them used family planning method. The common type of family planning method used by students was condom (39.3%). This finding was found to be higher a result obtained in Jimma comprehensive school where 27.2% of study participants who had sex used family planning methods [9]. The difference might be due to increased awareness of HIV/AIDS transmission prevention method resulted in use of condom more than ever before.

The prevalence of induced abortion in this was 2.5%. This result was much lower than a finding obtained in Uganda where among total participants who had terminated pregnancy previously, 74.2% of them had undergone an induced abortion [8]. This might be due to the increased level of awareness on risk of induced abortion and difference in other factors including religious and culture in those study areas. As revealed in this study most of the induced abortions (60%) were conducted by health professionals. It was lower than the finding obtained in Jimma where 84% of induced abortions were conducted by health professionals [9]. The variation might be due to lack of access to health institution and economic problems. The problem of unwanted pregnancies and induced abortion is of very large impact to the health of women worldwide, but school youths are still shown to be highly affected due various reasons. For example,

students might prefer to undertake induced abortion to avoid having their educational aspirations terminated [13]. The result of this study showed that among those who experienced induced abortion, (40%), of them stated as they are still in school which was the main reason why the commence induced abortion. Based on the finding of this study a significant association was found between marital status ($P=0.000$), family income ($P=0.000$) and overall knowledge of female students towards induced abortion. This finding was found to be congruent with a result obtained in Chelia Woreda, Oromia Region [11,14].

Conclusion and recommendation

This study had showed that the study population had poor level of knowledge about induced abortion. Also most of the studied participants had showed unfavorable/negative attitude toward induced abortion. Regarding practice towards induced abortion most students were in a good condition. However, there were students practicing sex without using any family planning methods as a result some students tried inducing abortion at home using local herbs. Majority of the respondents who participated in inducing abortion gave reason for their intervention of the pregnancy was still they were in school. Most of the abortions were performed by health professionals using modern medicine. Based on the finding of this study a significant association was found between marital status, family income and overall knowledge of female students towards induced abortion. While any of variables were not showed a significant association with attitude of respondents towards induced abortion. Based on the finding of the study it was recommended that health information should be disseminated to school about the effect of unsafe abortion and importance of sex education in preventing unwanted and unplanned pregnancy. Health information and education on modern contraceptive methods should be encouraged and modern contraceptives should be available. It would be better if there are conditions where young people discuss about sexual and reproductive health issues with their parents, friends and others. Finally, it was recommended that further study should be done on knowledge, attitude and practice towards induced abortion in this area.

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DOI: [10.19080/GJORM.2018.05.555659](https://doi.org/10.19080/GJORM.2018.05.555659)

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