

# Assessment of Knowledge, Attitude, Practice and Associated Factors on Emergency Contraception Among Level- II to Level-IV Female Students in Hawassa College of Health Sciences, South, Ethiopia

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## Abstract

**Background:**Emergency contraception is a method used after unprotected sexual intercourse and before the potential time of implantation to prevent unwanted pregnancy.(5,18) Students in higher education had limited Knowledge on emergency contraceptives and negative attitudes as well as the use is very low and abortion rate in cities is high compared to the national average.**Objective:**To assess the knowledge, attitude, practice and associated factors among level- II to level-IV female students in Hawassa College of health sciences with regard to emergency contraception.**Method:**A cross sectional design was employed among level- II to level-IV female students in Hawassa College of health sciences from June, 1-30/2011. The sample size of 334 female students selected by stratified random sampling technique. Data was collected using a structured self-administered questionnaire. To assess whether the instrument covered all dimensions of the construct, the relevant literature and experts in the field was consulted, with due consideration to the research problem. Finally, analyzed using SPSS V. 20 multiple logistic regressions were employed to describe the strength of association between the selected study variables by controlling the effect of possible confounders. **Result:** Among the 321 participants, 225(70.1%) ever heard about EC; and from those 169 (52.6%) ever heard about EC with in six months About 147 (45.8%) and 76(20.2%) of the respondents replied strongly agree and agree to use and recommend others to use respectively; that EC can prevent unwanted pregnancy and 88(27.4%) disagree and 10(3.1%) strongly disagree to use and recommend others to use that EC can prevent unwanted pregnancy only 56(17.4%) had ever used it, from them 54(16.8%) used progestin only pills (postinir-II) and 2(0.6%) IUCD **Conclusion:** The study shows the good knowledge and favorable attitude towards the EC among the female students in Hawassa College of Health Sciences, however, the study revealed low utilization of EC. Therefore, designing specific strategies to enhance emergency contraceptive utilization by increasing female students' awareness on emergency contraceptive is recommended.

**Keywords:**Emergency contraception, knowledge, attitude, practice and associated factors , Student,female

**DOI:** 10.7176/JNSR/9-15-05

**Publication date:** August 31<sup>st</sup> 2019

## 1. Introduction

Emergency contraception is a method used after unprotected sexual intercourse and before the potential time of implantation to prevent unwanted pregnancy (5). EC is used in situations of contraception failure, having sexual violence as well as from a lack of knowledge about or access to contraception. Its primary use is in reducing the need for abortions and associated negative maternal health consequences (2, 7).Globally, use of EC is relatively low. In the United States usage has been reported as 9.4%, in South Africa as 4% and in Iran as 5.2% (1). In addition, studies have showed that knowledge, and attitude on EC among students are limited (5). Most of the college students fall under sexually active age group and form a high risk group for unwanted pregnancy, because a large percentage of them engage in sporadic pre-marital sex, which could be prevented by using emergency contraception (18).

Unwanted pregnancy leads them to attempt illegal abortion, which results in death or illness or loss of future fertility, and on the other hand, they are obliged to leave their education (9).

In developing country, WHO estimates that one woman dies every eight minutes due to unsafe abortion. In Africa, such as Gahanna, Emergency contraceptive pills have now become an integral part of contraceptive services to prevent conception following unprotected and unplanned exposure or contraceptive accidents like slippage of condom and forgotten pills. Also Emergency contraceptive pills are used by victims of rape cases.

In case of our country Ethiopia, reproductive health need assessment report showed that there is little knowledge and information available about emergency contraceptive. The major factor limiting the use of Emergency contraception was inadequate information about their effectiveness and availability or unfavorable opinions about their safety due to misinformation. Most of college students are from rural areas, where the chance of getting information on sexual and reproductive health is limited and most go outside campus and without parents' supervision, their vulnerability to unintended sex and unwanted pregnancy is high. In case of south Ethiopia, in Hawassa University, female students had been experiencing high rate of unintended sexual practice and pregnancy.

The recent study shows that 41.9% of female students ever had sexual intercourse and from this, 2.2% are experienced forced sex (9). As a result, the Federal Ministry of Health of Ethiopia has allowed the distribution of EC in drug stores and the provision of safe abortion services in medical setup for those who demand the service under certain conditions such as rape, incest, sexual violence, etc (1, 19). In major cities, in Ethiopia, even though EC is easily accessible from drug stores, abortion rate is quite high. Despite all these knowledge, attitude and practice of emergency contraceptives among female students in Hawassa College of health sciences is not yet studied. For this, several reasons can be given, yet the dominant one is lack of adequate knowledge on EC among the general public and students in particular (8). Assessing the knowledge, attitude, practice and associated factors among female college students is, the major strategies that need to be implemented to reduce the burden unwanted pregnancy on female students. Inadequate knowledge about emergency contraception and the psychosocial impact of unwanted and unintended pregnancy, the norms and cultures of the society, leads faced female students to different reproductive health problems such as: unsafe abortion, school dropouts, and non-completion of education among students due to unintended pregnancies, early marriage, and death from gynecological and obstetric complications.

This background dictates a need for primary research to offer empirical insights into the reasons for low knowledge, attitude and low practice of EC as a first step toward the reduction of pregnancy in college students. By this study we will identify the existing problems on concepts and the factors that influence practice of EC among the college female students. As in Hawassa College of health sciences, there is no information regarding assessment of knowledge, attitude and practice on emergency contraception among level-II to level-IV female students but the knowledge gap among second cycle primary school female evening students in Hawassa is 71.7% while only 28.3% of students have good knowledge of emergency contraception. Also the attitude gap is 39.2% with 60.8% positive attitude about emergency contraception and the practice gap is 77.5% with only 22.5% ever use of emergency contraceptive (4). The study will contribute to bring about possible solutions; it will indicate magnitude of the problem to public programmers, private sectors, and NGOs in order to act upon to fill the gaps on these concerns.

## 2. Subjects and Methods

### 2.1. Study area and period

The study was conducted in Hawassa College of Health Sciences from September 18/2017- October 02 /2017 There are a total of 2,253 level-II to level-IV students; of which 625 are male and 1,628 are female students in 2017 The college is providing training of medium professions like comprehensive health nursing, midwife, pharmacy, emergency ambulance technicians as well as laboratory departments in diploma ( 21 ).

### 2.2. Study design

Institution based cross-sectional study was conducted in Hawassa College of Health Sciences.

### 2.3. Study population

Level-II, level-III, and level-IV female students in Hawassa health science college who were selected by stratified sampling technique and meet inclusion criteria

### 2.4. Inclusion and Exclusion criteria

#### 2.5. Inclusion criteria

Level-II to level-IV female students aged  $\geq 15$  years in Hawassa College of health sciences.

#### 2.6. Exclusion criteria

Those who are severely ill or having mental disorder

### 2.7. Sample size and Sampling technique

The sample size was determined by using single population proportion formula by the following assumption for prevalence of utilization for EC Is 46.3% The use of EC among female students after unprotected sexual intercourse to be 46.3% from the previous study [9]

Desired precision ( $d$ ) as 5% and 95% as confidence interval. Therefore sample size is calculated as;

$$n = \frac{(z \ a / 2)2(p)(1-p)}{d^2}$$

Where

n= sample size

P=proportion

d= margin of error

z= standard normal curve of respective confidence interval

$$\frac{(1.96)2.(0.463).(0.537)}{(0.05)2} = 420$$

Population correction formula was required since there are a total of 1628 female students from level-II to level-IV in 2017 and this is less than 10,000

$$nf = ni/[1 + ni/N] = 420/[1+420/1628]=334.$$

Where

nf = final sample size after correction

ni = initial sample size before correction

N= Number of students from level-II to level-IV students

Therefore the final sample size was 334.

A total of 334. level-II to level-IV female students were selected using stratified random sampling technique.

#### SAMPLING FROM LEVEL-II

Level-II female students totally are 881, to include the appropriate sample the students were selected by simple random sampling technique and the sample size was 181 subjects.

#### SAMPLING OF LEVEL-III

Totally Level-III female students are 541, to participate in the study, the students were selected by simple random sampling technique; the sample size was 111 subjects.

#### SAMPLING OF LEVEL-IV

Totally Level-IV female students are 206, to participate in the study, the students were selected by simple random sampling technique;; the sample size was 42 subjects.

### 3.1. Data collection procedures

Data was collected by self administered questionnaire for level-II to level-IV female students in Hawassa health science college . The questionnaire prepared in English and translated to Amharic for interview by other translator then reverse to English for data analysis. The questionnaire containing socio- demographic characteristics, knowledge of Emergency contraceptive, attitude toward Emergency contraceptive, practice of Emergency contraceptive and sexual history of the students

### 3.2. Data quality assurance

Quality of data assured through pretesting of the questionnaire on 5% female college students of the same level in Hawassa Furra College having the same socio-demographic character before the actual data collection

Data was collected by trained five diploma nurses. The data collectors administered questionnaire at the college over a number of days under the supervision of the investigator. Every day 5% of the questionnaire was randomly selected and checked for completeness and consistencies. In addition meetings have been held to discuss the problems if any before the data collectors go back to their home

### 3.3. Data processing and analysis

The collected data was entered and processed using SPSS V. 20.0 software. After organizing and cleaning the data frequencies and percentages were calculated on all variables that are related to the objectives of the study. Bivariate and Multivariate analysis was done

### 3.4. Operational definition

1. **Emergency contraception:** a kind of contraception indicated after unprotected sexual intercourse to prevent unintended pregnancy.
2. **Knowledge-** is awareness of the presence of the methods, type of EC methods, their sources, drug content, and the ability to identify when to take EC after unprotected sex, situations to take EC, mechanism of action, its side effects, legal status, and effectiveness of ECs to prevent unintended pregnancy. The study subjects' knowledge on EC are classified as good knowledge (students who score more than 4(50%), fair (who score 1-4 (16.7-50%) and poor (who score Zero (0%) according to the number of correct responses to the eight series of knowledge questions
3. **Attitude** – is opinions, out looks, values, position and intentions of the study subjects towards the utilization of EC methods. Study subjects who have concerns and negative opinion about ECs and respond negatively for attitude items will be regard to have negative attitude towards EC, while those who have positive outlook and no concern towards ECs and respond the attitude questions positively will be considered to have a positive attitude towards EC
4. **Practice** – ever use of EC on the basis of their knowledge when the study subjects are exposed to unprotected sexual intercourse to prevent unintended pregnancy. Study subjects who exposed to unprotected sex and use ECs is good practice and who exposed to unprotected sex but not use is not good practice.

**5. Unprotected sexual intercourse** – is an intercourse taking place without barrier methods such as no contraceptive has been used, when there is a contraceptive accident (failure) or misuse, condom rupture, slippage or misuse, failure to abstain on a fertility day of the cycle in a women who uses the calendar method and in case of rape (forced sex)

**a. Ethical considerations**

Ethical approval for the proposed research was obtained from Hawassa College of Health Sciences and Institutional Research Ethics Review Committee (IRERC). The respondents was informed about the objectives and purpose of the study and verbal consent was obtained from each participant before data collection. Their right not to participate and the freedom to refuse at any step was secured. The information collected was treated as confidential and used only for research purposes.. Privacy and confidentiality was maintained by using code numbers rather than their name and assuring the confidential nature of the responses both during and after the administration of the questionnaire.

**6. Results**

**Sociodemographic Characteristics of the respondents**

Among total of 334 students assessed, 321 female students completed the questionnaire making a response rate of 96.1%. Age of study participants ranged from  $\geq 15$ -34 years with mean of  $20.35 \pm 2.5SD$  years.

Table 1: Socio-Demographic Characteristics of Female Students, Hawassa college of health sciences, south Ethiopia, October, 2017 (n=334).

Variables	Frequency	Percent
AGE (n=321)		
Greater than or equals to 15-19 years	120	37.4
20-24 years	185	57.6
25-29 years	9	2.8
Greater than or equals to 30 years	7	2.2
Residential place (n=321)		
Urban	234	72.9
Rural	87	27.1
Religion (n=321)		
Muslim	22	6.9
Orthodox Christian	61	19.0
Catholic Christian	4	1.2
Protestant Christian	231	72.0
Other specify	3	.9
Educational status of respondent (n=321)		
Level-II	173	53.9
Level-III	106	33.0
Level-IV	42	13.1
Marital status (n=321)		
Single	257	80.1
Maried	62	19.3
Divorced	2	.6
Currently living with (n=321)		
Alone	91	28.3
With my boyfriend	4	1.2
With my husband	59	18.4
With my parents	101	31.5
Other; specify	66	20.6
Income per month		
Less than or equals to 300 ETB	26	8.1
300-600 ETB	186	57.9
Greater than 600 ETB	109	34.0

\*Other religious group refers to Adventist and Jehovah

**a. SEXUAL EXPERIENCE AND PRACTICE OF RESPONDENTS'**

Among the respondents, 144(44.9%) had a history of sexual intercourse, 117(36.4%) had experienced unprotected sexual intercourse and from those 59(18.4%) ever pregnancy and 24(7.5%) had a history unwanted

pregnancy. From those history of unwanted pregnancy 16(5%) had a history abortion; from those abortion 7(2.2%), 5(1.6%) and 4(1.2%) were performed public health facility, private clinic and self-inflicted respectively..

3.2. Table 2: Sexual and Reproductive History of Female Students, Hawassa College of health sciences, South Ethiopia, October, 2017

Variables	Frequency	Percent
Age at first sexual intercourse(n=144)		
Age before 15 years	11	3.4
Age 15-19 years	75	23.4
Age above 20 years	42	13.1
I do not remember	16	5.0
Unprotected sex among sexually active respondents (n=144)		
Yes	117	36.4
No	27	8.4
Had ever been pregnant among respondents(n=144)		
Yes	59	18.4
No	85	26.5
Any Unwanted pregnancy among respondents(n=59)		
Yes	24	7.5
No	35	10.9
Ever had induced abortion among respondents(n=24)		
Yes	16	5.0
No	8	2.5
Where induced abortion conducted among respondents (n=16)		
Public health institution	7	2.2
Private clinic	5	1.6
Self inflicted	4	1.2

Table 3 Bivariate analysis Table  
 Knowledge and associated factors

	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Adjusted educational status(1)	-1.780	.294	36.589	.000	.169	.095	.300
Constant	-.197	.153	1.665	.197	.821		
Adjusted income (1)	-.479	.253	3.603	.058	.619	.378	1.016
Constant	-.545	.199	7.527	.006	.580		
Resident place(1)	-.220	.270	.667	.414	.802	.473	1.361
Constant	-.693	.227	9.289	.002	.500		
Adjusted age(1)	-.164	.248	.434	.510	.849	.522	1.381
Constant	-.784	.158	24.457	.000	.457		
Adjusted marital status (1)	.072	.308	.055	.814	1.075	.588	1.966
Constant	-.866	.136	40.615	.000	.421		

Among the 321 participants, 225(70.1%) ever heard about EC; and from those 169 (52.6%) ever heard about EC with in six months. The sources of information were 80 (24.9%) 51(15.9%), 28(8.7%), 8(2.5%) and 2(0.6%) had obtained their information from formal education, health workers mass media, internet and boyfriends respectively.

To assess the level of actual knowledge, a series of eight knowledge questions (on method identification; drug composition; time frame for effective use; effectiveness of the drug; appropriate situations for use; and places where emergency contraception can be found) were posed to those students who had heard of emergency contraception

Concerning the time limit for taking pills and the insertion of an IUCD as emergency contraception, about 158(49.2%) indicated correctly that emergency contraceptive pills should be taken within 72 hours after unprotected sexual intercourse and remaining did not identify time limit for taking pills, while only 11(3.4%)

replied that an IUCD should be inserted within 5 days and also remaining don't know time limit for taking IUCD Regarding the type of contraceptives used as emergency, 136(42.4%) said POP, 28(8.7%) said EOP, 17 (5.3%) said IUCD, 14(4.4%) said monthly inject able, 29(9%) said I don't know and 1(0.3%) other unspecified used as emergency contraception; from them 192(59.8%) were approve EC methods prevent unwanted pregnancy

Table 4 Multiple regression of knowledge

	B	Sig.	Exp (B)	95% C.I. for EXP(B)	
				Lower	Upper
Adjusted educational status(1)	-1.796	.000	.166	.093	.297
ADJINCOME (1)	-.552	.045	.576	.336	.987
Residentplace (1)	-.312	.290	.732	.411	1.304
Constant	.387	.242	1.473		

multivariate analysis shows that, Students as the year of study in college increases, their knowledge about emergency contraceptive appears to be increase [AOR=2.4; 95%CI: 1.12, 3.83] for level III and above. Similarly female students who had history of increased income per month 600 and above has good knowledge to those of their counterparts (Table 6).

#### ATTITUDE OF RESPONDENTS TOWARDS EMERGENCY CONTRACEPTIVES

About 147 (45.8%) and 76(20.2%) of the respondents replied strongly agree and agree to use and recommend others to use respectively; that EC can prevent unwanted pregnancy and 88(27.4%) disagree and 10(3.1%) strongly disagree to use and recommend others to use that EC can prevent unwanted pregnancy

The reason for those agreed to use and recommend others to use EC were 88(27.4%) more effective, 67(20.9%) safer, 64(19.9%) more convenient and 4(1.2%) were for other reason. Those disagreed, was asked the reason why do not use and recommend others to use EC replied that 50 (15.6%) not effective, 30(9.3%) against my religion and 18(5.6) using regular contraceptive. Regarding to EC can prevent abortion and its complication; the majority of the respondents believes 157(48.9%) emergency contraception necessary to prevent abortion and its complication, 80(24.9%) they do not think and 84(26.2%) they don't know.

Table 5 Bivariate analysis

Attitude and associated factors

Variables	B	Sig.	Exp (B)	95% C.I. for EXP(B)	
				Lower	Upper
Adjusted educational status(1)	.784	.007	2.190	1.237	3.880
Constant	1.016	.000	2.761		
Adjusted marital status (1)	-.484	.138	.616	.325	1.168
Constant	1.435	.000	4.200		
Resident place(1)	.352	.237	1.422	.794	2.545
Constant	1.083	.000	2.955		
Adjusted age(1)	-.277	.316	.758	.442	1.302
Constant	1.455	.000	4.286		
Adjusted income (1)	.021	.942	1.021	.579	1.801
Constant	1.319	.000	3.739		

Table 6 Multiple regression analysis for Attitude towards emergency contraceptive

	B	Sig.	Exp (B)	95% C.I. for EXP(B)	
				Lower	Upper
Adjusted educational status(1)	.770	.009	2.159	1.217	3.831
Adjusted marital status (1)	-.448	.175	.639	.334	1.220
Constant	1.116	.000	3.053		

After adjusting for other variables, favorable attitude towards EC was significantly higher among Students of age 20 and above than their counter parts [AOR=1.8; 95% CI: 2.2, 4.96]. Favorable attitude towards emergency contraceptives was also higher among ever married respondents' and respondents who had history of pregnancy, with an adjusted odd ratio of [AOR=1.1; 95%CI: 0.67, 2.26] and [AOR=3.5; 95%CI: 2.03, 7.97] respectively. The likelihood of favorable attitude towards EC among those female students who had sexual intercourse was 4.8 times higher than their counter parts [AOR=4.8; 95%CI: 3.80, 7.45] (Table 6).

#### RESPONDENTS' UTILISATION OF EMERGENCY CONTRACEPTION

Regarding the utilization of EC, among those who are sexually active, and/or of the 225 students who had heard about emergency contraception, only 56(17.4%) had ever used it, from them 54(16.8%) used progestin only pills (postinir-II) and 2(0.6%) IUCD. Those who used emergency contraception stated the following situations that tend them to use it as reasons; 31(9.7%) for they practiced sex with out condom or use of any other contraceptives,

18(5.6%) timing was miss calculated, 4(1.2%) forced to have sex and 3(0.9%) contraceptive failure reasons. Of the students who had ever used emergency contraception, 23(7.2%) obtained it from public hospital, 13(4%) from pharmacy, 12(3.7%) from private clinic and the rest 8 (2.5%) from reproductive health clinic. Most of the sexually-active respondents who had a history of sexual practice 144(44.9%) complained that the main challenge with regard to utilisation of emergency contraceptives was their unavailability in pharmacies at the time of need. The second challenge mentioned by the respondents was 26(8.1%) of them used regular contraceptive methods, 24(7.5%) had no enough information about Ecs, 5(1.6%) Religious or moral reasons, 3(0.9%) Cost of ECs is not affordable and 23(7.2%) due to other reasons.

Table 7 Bivariate analysis of practice of emergency contraceptives and associated factors.

Variables	B	Sig.	Exp (B)	95% C.I. for EXP(B)	
				Lower	Upper
Adjusted educational status(1)	-.844	.020	.430	.212	.873
Constant	.817	.003	2.263		
Adjusted marital status (1)	.874	.016	2.396	1.173	4.894
Constant	-.027	.908	.974		
Resident place(1)	-.409	.317	.664	.298	1.481
Constant	.651	.068	1.917		

Table 8 Multiple regression analysis for practice of emergency contraceptive

	B	\Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
ADJEDUSTATUS(1)	-.744	.048	.475	.227	.993
ADJMARTALSTATUS(1)	.769	.042	2.158	1.030	4.522
Residentplace(1)	-.552	.197	.576	.249	1.333
Constant	.848	.074	2.336		

With regard to practice of EC among sexually active female students (n=188), the multivariate logistic regression analysis shows that female students who had first sexual intercourse at age 20 and above were 4 times more likely to use EC as compared to those who had their first sexual intercourse at younger age (15-19 years), [AOR: 4.048; 95% CI=1.721, 9.524]. Respondents who had history of pregnancy were 3 times more likely to use EC than those with no exposure of pregnancy [AOR: 3.122; 95% CI=1.346, 7.240]. Similarly, students who had good knowledge on EC were 3.2 times more likely to use EC than those female students who were not knowledgeable about EC [AOR: 3.248; 95% CI=1.320, 7.988]. The result also showed that respondents who had experience of other forms of regular contraceptive use were 5 times more likely to use EC than those who didn't use other forms of regular contraceptives [AOR: 5.019; 95% CI=2.234, 11.274] (Table 7).

## 7. Discussion and Conclusion

In this study about 144 (44.9%) of the subjects reported that they are already sexually active. This result is nearly similar to the study conducted on South Africa Secondary School female students and Nigerian female undergraduates' students [19,20]. The result is also higher than similar study conducted on higher education students in Adama, Assella and Addis Ababa, [8,17,21]. In this study about 59(18.4%) of ever sexually active respondents gave history of pregnancy, of which 40.7% were unwanted pregnancies. But, the prevalence of unwanted pregnancy among the total study participants was 7.5%, which is lower than reported by other study conducted among higher education female students in Addis Ababa,

Lack of information given to teenagers regarding contraception is highlighted as a key factor.

Among the 321 participants, 225(70.1%) ever heard about EC higher than A study conducted among university students in Cameroon which is 63 % and The study conducted among Women Seeking Abortion Services in Dire Dawa, Ethiopia knowledge towards EC showed that 133 (34.1%) women were knowledgeable while 257 (65.9%) were not knowledgeable (12). BUT lower than Study conducted in Kenya medical training center, Kenyatta, showed overall 74.6 % of the respondents had heard of EC.

multivariate analysis shows that, Students as the year of study in college increases, their knowledge about emergency contraceptive appears to be increase [AOR=2.4; 95%CI: 1.12, 3.83] for level III and above. Similarly female students who had history of increased income per month 600 and above has good knowledge to those of their counterparts

Women especially the young in rural areas remain largely unaware of EC and don't have the option of using it to prevent pregnancy following unplanned & erratic sex (6, 10). Given increasing adolescent sexual activity and decreasing age at first sex in developing countries, the use of contraceptives to prevent unwanted pregnancy and unsafe abortion is especially important (10).

About 147 (45.8%) of the respondents replied strongly agree and agree to use lower than that 51.3% (200)

of the respondents had positive attitude towards use of EC and 76(20.2% recommend others to use lower than that Study in Kenya medical center 46.2% said they would use or recommend their friends to use emergency contraception. and A total of 53.8% said that they would not use or recommend their friends to use emergency contraception (6, 10).

After adjusting for other variables, favorable attitude towards EC was significantly higher among Students of age 20 and above than their counter parts [AOR=1.8; 95% CI: 2.2, 4.96]. Favorable attitude towards emergency contraceptives was also higher among ever married respondents' and respondents who had history of pregnancy, with an adjusted odd ratio of [AOR=1.1; 95%CI: 0.67, 2.26] and [AOR=3.5; 95%CI: 2.03, 7.97] respectively. The likelihood of favorable attitude towards EC among those female students who had sexual intercourse was 4.8 times higher than their counter parts [AOR=4.8; 95%CI: 3.80, 7.45] (Table 6).

Regarding the utilization of EC, among those who are sexually active, and/or of the 225 students who had heard about emergency contraception, only 56(17.4%) had ever used it, from them 54(16.8%) used progestin only pills (postinir-II) and 2(0.6%) IUCD. Those who used emergency contraception stated the following situations that tend them to use it as reasons; 31(9.7%) for they practiced sex with out condom or use of any other contraceptives, 18(5.6%) timing was miss calculated, 4(1.2%) forced to have sex and 3(0.9%) contraceptive failure reasons.

Of the students who had ever used emergency contraception, 23(7.2%) obtained it from public hospital, 13(4%) from pharmacy, 12(3.7%) from private clinic and the rest 8 (2.5%) from reproductive health clinic. Most of the sexually-active respondents who had a history of sexual practice 144(44.9%) complained that the main challenge with regard to utilisation of emergency contraceptives was their unavailability in pharmacies at the time of need. The second challenge mentioned by the respondents was 26(8.1%) of them used regular contraceptive methods, 24(7.5%) had no enough information about Ecs, 5(1.6%) Religious or moral reasons, 3(0.9%) Cost of ECs is not affordable and 23(7.2%) due to other reasons.

With regard to practice of EC among sexually active female students (n=188), the multivariate logistic regression analysis shows that female students who had first sexual intercourse at age 20 and above were 4 times more likely to use EC as compared to those who had their first sexual intercourse at younger age (15-19 years), [AOR: 4.048; 95% CI=1.721, 9.524]. Respondents who had history of pregnancy were 3 times more likely to use EC than those with no exposure of pregnancy [AOR: 3.122; 95% CI=1.346, 7.240]. Similarly, students who had good knowledge on EC were 3.2 times more likely to use EC than those female students who were not knowledgeable about EC [AOR: 3.248; 95% CI=1.320, 7.988]. The result also showed that respondents who had experience of other forms of regular contraceptive use were 5 times more likely to use EC than those who didn't use other forms of regular contraceptives [AOR: 5.019; 95% CI=2.234, 11.274]

This study revealed the good knowledge and favorable attitude towards the EC among the female students in Hawassa College of Health Sciences. However, in this study revealed low utilization of EC which is 17.4%. The great impeding of Emergency Contraceptive to prevent unintended pregnancies and induced abortions was considered as an option for the study participants. The most associated factors of the usage of emergency contraceptive method are the improved educational status as well as single marital status of the students.

## ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted Odds Ratio
CI	Confidence Interval
EC	Emergency Contraception
ECP	Emergency Contraception pills
EOP	Eostrogen Only pills
HIV	Human Immune Virus
IRERC	Institutional Research Ethics Review Committee
IUCD	Intra Uterine Contraceptive Device
KAP	Knowledge Attitude Practice
NGO	Nongovernmental Organization
OR	Odds Ratio
POP	Progestin Only Pills
RH	Reproductive Health
SNNPR	Southern Nations Nationalities and Peoples Region
SPSS	Statistical package of social science
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
USA	United States of America
WHO	World Health Organization



## 8. Acknowledgment

I would like to express my gratitude to data collectors and Hawassa College Of Health Science staffs for their unreserved help and facilitation.

My heartfelt thanks also goes to Hawassa College Of Health Science for giving me this chance for practicing this research work. Finally, I am greatly indebted to my wife Netsanet Desalegne who gave me courage deserves my utmost gratitude for helping me to do this Research work

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