

# Knowledge and Practice of Emergence Contraceptives among Female Students of Ejere High School and Preparatory School, Ejere Woreda, West Shoa Zone, Oromia Region, Central Ethiopia

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## Abstract

**Back ground:** Emergency contraceptive is a type of modern contraception that is indicated after un-protected sexual practice or due to contraceptive failure. Although Emergency contraceptive prevent unwanted pregnancy and its consequences like unsafe abortion and unintended child birth, there is no information about the knowledge and practice of Emergence contraceptive among young females in the study area.

**Objective:** The aim of this study is to assess the knowledge and practice of Emergence contraceptive among female students of Ejere high school and preparatory school.

**Method:** A facility based cross sectional study design was conducted among 270 Ejere high school and preparatory school female students from April 1-15 of 2015. A simple random sampling technique was used to select the study subjects until the required sample size was collected. Then the collected data was analyzed and presented in tables, figures and narratives.

**Results:** From the total respondents, about 116 (43%) of the respondents were replied as they have heard about emergence contraceptives and only 44 (38%) and 14 (22%) of the respondents were knowledgeable and ever practiced emergency contraceptive respectively. Among those sexually active respondents (23.7%), some of the reasons why they were not using ECs are lack of knowledge about ECs, no desire to use the methods and due to religious reasons.

**Conclusion:** The study indicated that the knowledge and utilization level of emergency contraceptives among the respondents were low. Therefore, Ejere woreda health office in collaboration with Ejere educational office should work on awareness creation about emergency contraceptives, when it was used, its advantage to prevent unwanted pregnancy and its damaging consequences after unprotected sex among the young female students.

**Keywords:** Emergency contraceptives, knowledge, Practice, Ejere high and preparatory school

## 1. INTRODUCTION

Emergency contraception refers to a group of birth control modalities that are used after unprotected sex within 72 hours or when there is a contraceptive failure with in a defined time limit (1, 2). It is an important contraceptive option for women who miss the first chance of pregnancy prevention by reducing the incidence of unintended pregnancy (3).

Unplanned pregnancies among young women are a worldwide problem with social and economic repercussion for the unprepared young individual. A critical challenge in the global effort to reduce maternal mortality is the persistence of unsafe abortion as result of unwanted pregnancy which account for 13% of pregnancy related deaths worldwide (4).

Unsafe abortion has much ill effects in women's health, each year about 68,000 woman die, because of unsafe abortion and millions of women end up with many complications of unsafe abortion, which could include sever infection and bleeding, this could have been immensely reduced by using emergency contraceptive (5).

Unsafe abortion as a result of unwanted pregnancy is one of the leading causes of maternal mortality and morbidity in Ethiopia. Ethiopia has a high incidence of unwanted pregnancy and unsafe (septic abortion), particularly among adolescents. Several studies in the country have revealed that women who tend to undergo induced abortion are below the age of 30 years and are literate, many of whom being above the secondary educational level. Reasons for such huge numbers of unintended pregnancy in Ethiopia include a low rate of contraceptive use, method failure and high unmet need for contraceptives (6).

Since emergency contraceptive plays a vital role in preventing unintended pregnancy which in turn helps to reduce unintended child birth and unsafe abortion, which are major problems of maternal health. There is limited data to give information about the knowledge and practice of Emergence contraceptive among female students in study area. Thus, this study is intended to assess the knowledge and practice of Emergence contraceptive among female students of Ejere high school and preparatory school.

## 2. Methods and Materials

### Study area

The study was conducted in Ejere high school and preparatory school. Ejere high school and preparatory school

has a total of 1533 students and from this 681 were female student. Ejere high school and preparatory school is found in town. Ejere town is found at a distance of 47km from Addis Ababa to the west direction in west shoa zone of Oromia region. The town had 3 urban Administrative kebeles with 13,972 total populations.

#### **Study period**

The study was carried out from April 1 - 15 of 2015.

#### **Study design**

A facility based Cross sectional study design was conducted to assess knowledge and practice of Emergency contraceptives among Ejere high school and preparatory school students.

#### **Source population**

The source population of the study was all Ejere high and preparatory school female students

#### **Study population**

Female students who were randomly selected from Ejere high and preparatory school

#### **Inclusion criteria**

All female students who are enrolled in 2015 academic year & available during data collection

#### **Exclusion criteria**

Those female students who had seriously ill during the study period

#### **Sample size determination and sampling technique**

In order to determine the sample size of the study, we use single population proportion formula.

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

Where,  $p = 0.471$  = from other study done about knowledge of ECs

$d$  = marginal error = 5%

$(z^{\alpha}/2)^2$  = normal standard value at 95% confidence

$n$  = minimum sample size

$$n = \frac{(1.96)^2 \times 0.471 (1-0.471)}{(0.05)^2}$$

$$n = 383$$

Since our source population is less than 10,000 population, using the correction formula  $nf = n/1 + n/N$ , Where  $nf$  is the final sample size,  $N$  is total number of Ejere high school and preparatory school female students (681). Then, final sample size is  $nf = n/1 + n/N = 383/1 + 383/681 = 245$  and adding 10% non-response rate,  $nf = 270$

#### **Sampling procedure**

After calculating the sample size of the total study from the total number of Ejere high school and preparatory school female students, the number of participant is allocated proportional to grade 9<sup>th</sup> = 298, 10<sup>th</sup> = 269, 11<sup>th</sup> = 81 and 12<sup>th</sup> = 33 and then based on the registration of the class a simple random sampling method was used to select and approach the study participants.

#### **Data collection Method**

For this study a self administered structured Questionnaires were conducted. The Questionnaires was contain open as well closed ended Question which covers socio demographic information, reproductive health issues, knowledge, attitude and practice of emergency contraceptive. The Questionnaire were prepared in English and translated to Afan Oromo and Amharic then returned to English for its consistency. The study participants were participated based on their willingness in the study and adequate information was given on how to fill the questionnaire.

#### **Operational definitions**

- **Emergency contraceptive** – A contraceptive method that can be used after unprotected sexual practice or contraceptive failure within 72 hours
- **Knowledgeable about Emergency contraceptives** - From the question asked to assess the knowledge of emergency contraceptive, if the respondents were correctly responded above the mean value of the total questions and those who score less than mean value were considered as **not knowledgeable about Emergency contraceptives**.
- **Practice of emergency contraceptive** – if the respondents have ever practiced or utilized **Emergency contraceptives**.

#### **Data Quality Control**

Before starting the actual data collection, a pre tested was done in Holeta high school and preparatory school. Data collectors were trained on the instruments and the data collection process and throughout the data collection period necessary close supervision was made to correct any ambiguity.

#### **Data analysis**

After the data collection, each questionnaire was checked for its completeness and data cleaning was done. Then data was analyzed and presented by tables, graphs and charts.

### Ethical consideration

In order to precede the data collection process ethical clearance was taken from the ethical review committee of Jimma University, college of public health and medical sciences. Then letter of permission was handed to the Ejere high school and preparatory school to cooperate the data collection process. Finally, informed consent was obtained from the participants after explaining the purpose of the study. The confidentiality was assured by excluding their names and not to participated/ withdraw at any point from the study was respected.

### 3. RESULT

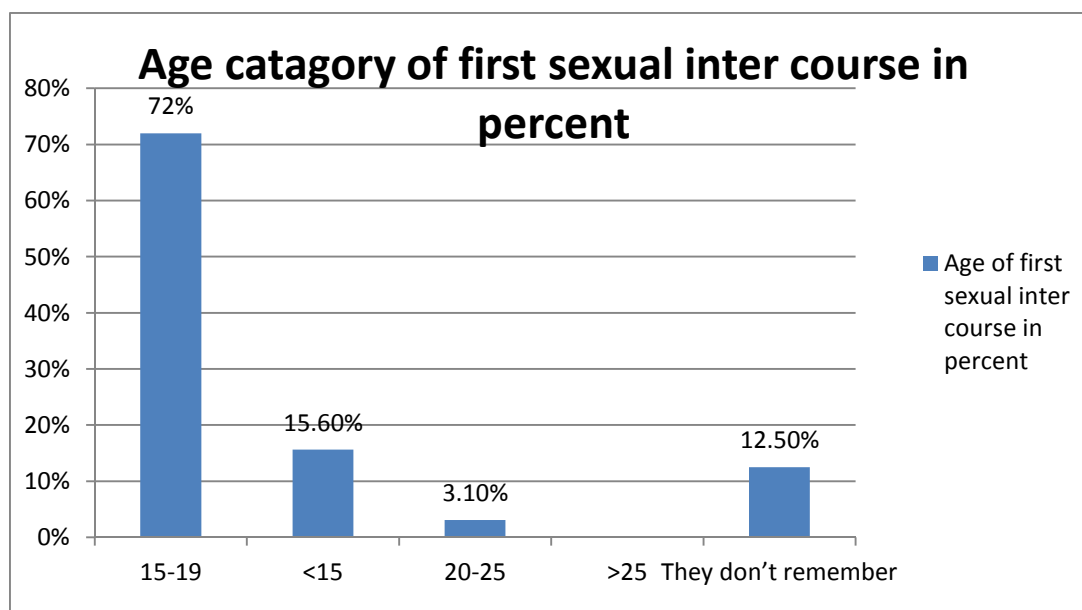
Out of the total of 270 participants, all of them were participated in the study making a response rate of 100%. From the total study participants about 252 (93.3%) of the respondents were in the age group of 15-19 years. Regarding the marital status of the participants, 255 (94.4%) were single and followed by 11(4%) were married. Among the study participants 221(81.9%) of the participants were Orthodox Christian followers and about 210 (77.7%) of the study participants were from Oromo in ethnic group. The educational level of most study participants were 118 (43.7%) grade 9<sup>th</sup> and 107 (39.6%) were grade 10<sup>th</sup> (Table 1).

#### Socio-demographic characteristics of respondents among female students of Ejere high school and preparatory school, Ejere woreda, 2015.

<u>Characteristics</u>	<u>Number (270)</u>	<u>Percent</u>
<u>Age (years)</u>		
➤ 15-19.....	252.....	93.3%
➤ 20-25.....	12.....	4.4%
➤ Above 25.....	6.....	2.2%
<u>Marital Status</u>		
➤ Single .....	255.....	94.4%
➤ Married .....	11.....	4%
➤ Divorced .....	3.....	1.1%
➤ Widowed .....	1.....	0.4%
<u>Religion</u>		
➤ Orthodox .....	221.....	81.9%
➤ Protestant.....	30.....	11%
➤ Muslim .....	14.....	5.2%
➤ Catholic .....	5.....	1.9%
<u>Ethnicity</u>		
➤ Oromo .....	210.....	77.7%
➤ Amhara .....	52.....	19.3%
➤ Gurage .....	7.....	2.6%
➤ Tigre .....	1.....	0.4%
<u>Place of residence</u>		
➤ Urban .....	142.....	52.6%
➤ Rural .....	128.....	47.4%
<u>Grade</u>		
➤ 9 <sup>th</sup> .....	118.....	43.7%
➤ 10 <sup>th</sup> .....	107.....	39.6%
➤ 11 <sup>th</sup> .....	32.....	12%
➤ 12 <sup>th</sup> .....	13.....	4.8%

#### Reproductive characteristics of the respondents

From the total study participants, about 64 (23.7%) of the respondents have ever had sex and 10 (15.6%) started sex before the age of 15 years and the rest 46 (72%) from 15-19 years and 8 (12.5%) of the respondent didn't remembered the year, when they started sex.



**Figure 4: distribution of first sexual practice age among respondents in April 2015.**

Concerning the history of rape, from the respondents who ever had sex in the past 28 (43.8%) of them were claimed to had sex without their consent. With regard to pregnancy experiences, from those who ever had sex in the past, 14 (22%) of them replied that they had been pregnant and from the pregnant study subjects 6 (43%) had practiced induced abortion illegally by different measure, 5(35.7%) of them went to the governmental health institution to solve their problem legally and 3 (21.4%) of the respondents continued pregnancy and give birth.

**Knowledge assessment of the respondents on Emergence contraceptives**

According to the study finding, about 116 (43%) of the respondents were ever heard about ECs. Of those respondents who aware of emergency contraceptive 44 (38%) correctly identified the recommended time limit to be taken i.e ECPs within 72 hours after un protected sex. From the total respondents 43 (16%) and 47 (17.4%) of the respondent also identified the recommended number of doses and the recommended time between the doses of ECs respectively.

**Table 3: knowledge regarding the timing, dosing and condition of using of ECs among the respondents.**

<u>Knowledge assessment question</u>	<u>Frequency</u>	<u>Percent</u>
Do you ever heard about ECs		
• Yes .....	116.....	43%
• No.....	154.....	57%
Recommended time to take ECps		
• Within 24 hours after sex .....	67.....	24.8%
• Within 72 hours after sex .....	44.....	16.3%
• Within 10 days after sex .....	47.....	17.4%
• Ever after missed period .....	36.....	13.3%
• I don't know the time.....	76.....	28%
Recommended number of doses for ECps		
• One dose.....	23.....	8.5%
• Two dose.....	43.....	16%
• Three dose.....	12.....	4.4%
• I don't know .....	192.....	71%
Recommended time between doses of ECps.		
• 12 hours apart.....	47.....	17.4%
• 24 hours apart .....	32.....	11.9%
• I don't know .....	191.....	70.7%

**Use of Emergence contraceptive among sexually active respondents**

From those sexually active and who had heard of ECs respondents, only 14 (22%) of the respondent had used the contraceptive method and about 12 (85.7%) of the participant said that they had used oral pills as ECs method and the rest 2 (14.3%) of the respondents used IUCD as ECs method. Of those sexually active and who had not ever used ECs, 22 (44%) were due to lack of knowledge about emergence contraceptive, 17 (34%) had not desire

to use it and 5 (10%) of the respondent due to religious reasons.

**Table 5: Practice of Emergence contraceptives among sexually active respondents in Ejere high school and preparatory school, 2015**

<b>Characteristics</b>	<b>Number</b>	<b>Percent</b>
Ever used ECs (64)		
➤ Yes .....	14 .....	22%
➤ No .....	50 .....	78%
Method of ECs Used (14)		
➤ Oral pill.....	12.....	85.7%
➤ IUCD.....	2.....	14.3%
➤ Both.....	0.....	0%
Reasons for not used ECs (50)		
➤ ECs not accessible .....	3 .....	6%
➤ Hadn't desire to use it.....	17 .....	34%
➤ Lack of knowledge about ECs.....	22 .....	44%
➤ Partner opposed.....	2 .....	4%
➤ Religious reason .....	5.....	10%
➤ Fear of side effect.....	1 .....	2%

#### 4. DISCUSSION

Although emergency contraception is not recommended as a regular family planning method, it is the most useful birth control modalities when it was used after unprotected sexual practice or contraceptive failure within defined time limit (4). The result of this study revealed that only 116 (43%) of the respondents had heard of the emergence contraception method. This is lower than the study done in Jimma University community school which shows about 64.1% were aware of emergence contraception (7). This could be due to difference in participant's socio-demographic variables, study setting and access to health information in Jimma University community than in a particular study area.

The study finding also revealed that about 44 (38%) and 14 (22%) of the respondent had knowledgeable and practiced emergence contraceptives. The study finding also showed that from the total respondents who were aware about emergence contraceptives, 38% correctly identified the recommended time limit to be taken ECPs within 72 hours after unprotected sex, About 37% and 40.5% of the respondents also identified the recommended number of doses and the recommended time between the doses of ECPs respectively. This finding is lower in the level of knowledge and practice rate of ECs than study conducted among female college students of Mekele town, which revealed that 44.5% of the respondents reported knowledgeable about emergency contraceptive and were practiced emergency contraception (4). The difference may be due to this study area was less urban than the other studies and study sample size.

Among the sexually active participants, about 87.5% had first sex below the age of 19 years and 43.8% of respondents were ever had sex without their consent. From those respondents who were sexually active, about 22% became pregnant and of them 43% induce abortion illegally and 35.7% have done safe abortion in governmental health institution, which is lower than the study conducted in Adama University among Female students (8). This could be due to difference in socio-demographic variables, study setting and access to health information know a day's than before.

#### 5. Conclusion and Recommendation

The study showed that only 38% of the respondents were knowledgeable about ECs and among the sexually active respondents only 22% of the respondents were used emergency contraceptives. Hence, there is a need to educate teenagers and adolescents about ECs, with emphasis on the correct time limit for use, the situation when it is used and the accurate messages about its effect on health. Moreover, health education program should be set up to preparatory and high school students to avail accurate information about emergency contraception and existing of "Reproductive health club's" in the school could be important for disseminating similar information.

#### Competing Interests

The authors declare that there are no any competing interests.

#### Authors' Contribution

**GT:** Conceptualized the research problem, designed the study, prepared the proposal, conducted field work, analyzed the data and prepared the report.

**SA:** Revised the proposal and report

**TG:** Revised the study report, prepare the manuscript for publication.

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