

# Assessment of Knowledge, Attitude and Practice toward Emergency Contraceptive Methods in Jimma Preparatory School Female Students, Jimma Town, Oromia Region, South West Ethiopia

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## Abstract

**Background:** Emergency contraceptive is contraceptive method that can be used by women in the first few days following unprotected intercourse to prevent unwanted pregnancy. Despite the availability of highly effective methods of contraception, many pregnancies are unplanned and unwanted. These pregnancies carry a higher risk of morbidity and mortality, often due to unsafe abortion. Many of these unplanned pregnancies can be avoided using emergency contraception. Besides, there is paucity of information on knowledge, attitude and practice of Jimma preparatory school female students related to emergency contraceptive.

**Objective:** To assess the knowledge, attitude and practice toward emergency contraception among female students of Jimma preparatory, school Jimma town, south-west Ethiopia. Methods: A cross-sectional study was conducted female students in Jimma preparatory school, Jimma town, south west of Ethiopia to assess the knowledge, attitude and practices of EC. The source of population of this study was all (N=340) female students in grade 11 and 12 enrolled in the school during academic year 2013/14. The sample size was calculated on base of 95% level confidence and 5% level of precision. It was adjusted taking 5% non-respondents using single population proportion formula. Data was collected by interviewing the study subjects by using semi-structured questionnaire. Then the data were tallied, edited and analyzed. Then the data were presented in graphs and frequency tables and chi-square test and significant association was declared at p-value of <0.05 with 95% CI.

**Result:** From 157 respondents about 137(87.26%) have ever heard about emergency contraception of which 52.2% has good knowledge about emergency contraceptive and; and only 11.46% of those who have practiced sex were used emergency contraceptive. Oral contraceptive pill was the most widely used 18(100%). Health professionals were the main source of information 138 (70.8%) Even though there is high awareness, there is a problem on timely using of the service and utilization of emergency contraceptive methods and unfavorable access to the service for school female students. Hence there is a need for collaborative effort to improve service quality and prevent female students from life threatening behaviors.

**Keywords:** Emergency contraceptive; Un-planned pregnancy; Female students

## Introduction

### Background

Emergency contraceptive is contraceptive method that can be used by women in the first few days following unprotected intercourse to prevent unwanted pregnancy. The use of ECS can inhibit or delay ovulation while others have suggested that its use may impair endometrial receptivity to implantation of the fertilized zygote [1].

There are four forms of ECS methods used as emergency contraceptives Levonorgestrel (LNG) only regimen 0.75 mcg LNG (or 1.5 mcg norgestrel) taken as soon as possible after unprotected sex about optimally within 72 h. There is no doubt that assisting women to achieve their reproductive intention will be best achieved by encouraging the adoption of routine family planning methods. Short of this mechanisms must be in place to assist women who, either because

of method failure or discontinuation become at risk of unwanted pregnancy and with to do something about it, ECS remain the better safe way in lowering rates of maternal morbidity and mortality from unsafe abortion following on wanted pregnancy [2-6].

According to the Alan Guttmacher Institute, unintended pregnancy can cause serious consequences for women, their families and countries. These include: denying a fundamental human right to control one's own fertility, prevent economic growth, Negative environmental impact, High maternal mortality and morbidity, High infant mortality; impact on child health and development [7]. Worldwide statistics revealed that despite the fact that highly effective methods of contraception (birth control) are available to prevent unintended pregnancy, each year, there are about 26 million legal and an estimated 20 million illegal abortions or in other word 126.000 abortions every day worldwide due to unintended pregnancies [8]. According to Fam plan et al. a planning status of births is estimated using nationally representative and small-scale surveys of 80 countries shows that of the 208 million pregnancies that occurred in 2008, 41 percent were estimated as unintended [9].

For over a decade, advocates have sought to improve access to Emergency Contraception (EC) throughout the world. These efforts have been highly successful in Europe and North America, where EC is now widely available over the counter, have generated much debate in Latin America, and are beginning to take hold in Asia. In Africa, however, the success of EC programs remains limited. Even in countries where the regulatory environment is favorable, resource constraints within the public sector block the ability to provide consistent and quality EC services at low cost. In a growing number of African countries, the private sector has emerged to fill these gaps, increasing access primarily among young, affluent urbanites. Low knowledge levels among the general population ultimately undermine the impact of such provision strategies, with as few as 10% of women in Senegal and Zambia reporting having ever heard of EC, and in the majority of African countries, less than 1% of all women have reported ever using it [10-12].

Statistics done on unplanned pregnancy showed that the rate of unplanned pregnancies varies around the world. The number is particularly high among teenagers and poor sectors of the population, but it is also seen among women age greater than 35, both single and married. This statistics revealed that even though the total number of unplanned pregnancies has decreased over the past few decades, the percentage remains high among teenagers [13], who could be due to gap in awareness, mal attitudes towards contraception, low accessibility or as a result of sexual assault. At times, the knowledge and practice might be there but no contraceptive is 100% effective, and it is always very crucial to have EC as a backup method [14].

A cross-sectional study conducted on KAP emergency contraception among female students of in 2012 revealed that only 41.9% heard about and 6.8% used EC [15] even though 28.9% of the student practices sexual intercourse [16].

According to ACOG practice emergency contraception is up to 89 percent effective in preventing pregnancy, depending on how quickly a woman begins the methods, the type of methods taken used, and when the sex occurred during the woman's menstrual cycle [17]. If it used correctly, it can help adolescents to prevent unintended pregnancy and its complication. In addition, providing emergency contraceptives can provide adolescents with a bridge to other reproductive health services [18].

Despite limited studies were conducted on issue of EC in the country focused on female students at university level only. Therefore, besides considering students at middle level institution this study attempted to look for attitude of female students towards EC and then to fill the gap in the previous studies.

This study come up with information related to KAP of Jimma preparatory school female students, which could be used as base-line information for researchers, local health planners and identifying factors that hinders the utilization of EC when necessary, and suggests possible solution that enhances EC utilization. It also helps Jiren high school clubs and HEW to design protocols to train family planning including EC and reinforce knowledge of EC services through school session for Jimma preparatory school female students.

Therefore, this study was aimed to examine the knowledge, attitude and practice of Jimma preparatory female students regarding emergency contraception.

## Methods and Materials

The study was conducted in Jimma town which is the capital city of Jimma Zone, Ethiopia. It is located 346 km far from Addis Ababa (Capital city of the country) to the southwest direction. According to 2007 national population and housing census the total population of Jimma town 120.960 from which males and females accounts 60,824 (50.2%) and 32.191 (4 and 9.8%), respectively. And the females reproduction age groups contribute the amount of 17.093 women (Ethiopia census) Jimma town has an average of altitude of 1865 meter above sea level with a mean annual rain fall of 1849 mm throughout the year. It has a "weynadega" climate with temperature ranges from (20-29)°C. The town has 6 high schools (both privet and public), one specialized hospital and one general hospital, 4Health center, 13health posts, many private clinics and 3 NGO. Institution based cross study was conducted on 157 female students by considering 10% non-response rate. The structured and well-organized questionnaires that are prepared after reviewing similar literature and modified to our context were used to collect data. The questionnaires were translated to Amharic language and then back to English by 3<sup>rd</sup> person to cheek for consistency. Collect related to the socio-demographic variable of the study population and data related to the variables elicited in there literature reviews associated with the study under consideration.

Data were collected with the protested structured questionnaires which are compared of open and closed ended questions and done by the assigned nurses, Ho and mid wife nurses in the antenatal care and mother and child health department (MCH), the questionnaire was cleared from vague, offensive, boring and irritating question. After the date being collected it is sorted cleaned, coded in to homogenous group for simplicity and clarity and it was analyzed by using manual scientific calculator and tally sheet and presented by table and graphs. Chi square test was used to see association between some variables and adherence. During data collection, time data was cheeked for its completeness and missing information at each point by principal investigator and data collator themselves for accurate collection of data. Data collectors were trained and there was continuous following; further more data was again being checked during entering data in to the computer before analysis [19].

### Ethical consideration

Before the beginning of the data collection there was asking the permission to the subject concerned body (JUSPR) to implement it. Then the data collectors were oriented about the purpose and the procedure of data collection and confidentiality and privacy was insured. It is also clear that participation is full bases on the willingness and verbal consent and name of the clients were not mentioned.

## Result

### Scio demographic characteristics

According to respondents 92 (58.6%), 67(42.67%), 110(70.1%), oromo, orthodox, urban Respectively. 142(90.4%) were within the age group of 15-19 years, 98(62.4%) were grade 11. %) Table 1.

S. No	Characteristics		Number	%
1	Age	15-19	142	90.4
		20-24	15	9.5
		>25	0	0
2	Religion	Orthodox	67	42.67
		Muslim	50	31.84
		Protestant	30	19.1
		Others	10	6.4
3	Class of study	Grade 11	98	62.4
		Grade 12	59	37.6
4	Place of origin	Rural	47	29.9
		Urban(town)	110	70.1
5	Ethnicity	1.Oromo	92	58.6
		2. Amara	30	19.1
		3.Tigre	15	9.55
		4. Others	20	12.7

**Table 1:** Scio demographic characteristics.

### Sexual Practice

34 (21.65) of the respondents have had sexual intercourse in their life time; about 26 (76.47) were by their consent and about 8 (23.6) were forced. Of those who had forced sex, student peers 22 (64.7%), unknown persons 8 (23.5%) were committing for majority of forced sex. Those who practiced sexual intercourse 20 (12.7%), only 18

(11.46%) of them had used emergency contraception and oral contraceptive pills were the only emergency contraception used. Of those who have used ECs 11 (61.1%) of them used with correct time and half of them were advised by the male partner. Some of the reasons for not using emergency contraception were fear of social stigma 8 (50) Table 2.

S. No	Characteristics		Number	%
1	Ever used emergency contraception	Yes	18	11.46
		No	142	88.53
2	Emergency contraception used	OCPs	18	100
		IUCD	0	
		Do not know/remember	0	
3	Time when emergency contraception used	Correct time	11	61.1
		Incorrect time used	4	22.2
		Do not know	3	16.67
4	Advice for EC usage	Friends female/peers	8	44.4
		Male friends/partner	5	27.7
		Health worker	5	27.7
		Parent	0	

		Other	0	
5	Reasons for not using EC	I don't know from where to get		
		Drugs unavailable	1	6.25
		Health institute is far to get	3	18.75
		Services	8	50
		Fear of social stigma	3	18.75
		I don't know its availability privacy not kept	2	12.5

**Table 2:** Contraception usage in emergency situations.

### Knowledge of Emergency Contraceptives

137 (87.26) of respondents who know about ECs, 97 (61.7%) agreed to use ECs when they practice unintended sexual intercourse, 125 (79.6) gave their opinions to advice their friends to use ECs, 80 (50.9%) of respondents were replied to agree with increment of prevalence of HIV/AIDS and other STIs when emergency contraceptive use in the society increases. Worries with the use of ECs includes, ECs will promote promiscuity 40(25.4%) and fear of side effects in using ECs 69 (43.9%) (Table 3).

S. No		Agree		Neutral		Disagree	
		No	%	No	%	No	%
1	If I have unintended sexual intercourse I would use ECPs.	97	61.7	32	20.3	28	17.8
2	If a close friend have unintended sexual intercourse I would advise her to use ECPs.	125	79.6	26	16.5	6	3.8
3	Widespread use of ECPs will increase the risk of STIs including HIV/AIDS.	80	50.9	30	19.1	47	29.9
4	Emergency contraception promote promiscuity	40	25.4	48	30.5	66	42
5	Emergency contraception is one way of abortion	49	31.2	41	26.1	67	42.67
6	I don't want to use emergency contraception for fear of side effects	69	43.9	44	28	47	29.9

**Table 3:** Contraceptives usage knowledge.

### Association of variables with the outcome variables

Chi square test was carried out to determine the association between socio- demographic factors with knowledge of EC among study participants. Students in the age range of 20 and above years were high likely ( $X^2=5.126$ ,  $P=0.0236$ ) to have knowledge of EC than those age between 15-19 students; grade 12 students were more likely to have knowledge of ECs than those grade nine students ( $X^2=11.942$ ,  $P=0.005$ ). Respondents who came from the urban area have more knowledge about ECs than those who came from the rural areas ( $X^2=10.055$ ,  $P=0.0015$ ) (Table 4).

Variables		Knowledge towards EC			X <sup>2</sup>	df	P-value
		Good No (%)	Poor No. (%)	Total No. (%)			
Age	15-19	70	72	142	5.126	1	0.0236
	>20	12	3	15			
	Total	82	75	157			
Religion	Orthodox	57	10	67	1.585	3	0.6628
	Muslim	40	10	50			
	Protestant	25	5	30			
	Others	7	3	10			
	Total	129	28	157			
Ethnicity	Oromo	75	17	92	0.084	2	0.9584
	Amhara	25	5	30			
	Tigre	12	3	15			
	Total	112	25	157			
Place origin	Rural	17	30	47	10.055	1	0.0015
	Urban	70	40	110			
	Total	87	70	157			
Class study	Grade 11	55	43	98	11.942	1	0.0005
	Grade 12	49	10	59			
	Total	104	53	157			

**Table 4:** Association of variables with the outcome variables.

### Discussion

The results of study shows almost one fifth (31.65%) of the total number of study participants have practiced sexual intercourse in their

life time. This result is somewhat lower than similar study conducted on higher education students in Addis Ababa which (19.5%) of the study participants were sexually active [18]. This variation could be due to high number of study participants for the study in Addis Ababa and only 251 female students for this study. The result was lower than the result of study conducted in Nigerian female undergraduates from whom 43% of the respondents were sexually active (29). This variation might be due to age difference, marital status and possibly from level of education. Among respondents who have practiced sexual intercourse 23.6% of them have had sex without the permission of the females (forced sex). Of the forced sex 12.7% resulted in unwanted pregnancy from which 45% of the pregnancies were continued to delivery while 55% have gone to induced abortion. Similar study in Addis Ababa showed high rate of unwanted pregnancy (73.5%) higher rate of induced abortion (71.7%) from which 29% were under unsafe condition. The possible explanation for low rate of unwanted pregnancy, low rate of induced abortion and high rate of delivery in this study could be provision of health information by students from Jimma University through a community based education as CBTP, TTP, and SRP. The result from this study revealed that only 87.26% of the respondents had ever heard about emergency contraception's. This is somewhat higher than the reports from Kenya (Nairobi), on female who come for family planning service (20%), Adama University on undergraduate female students (46.8%) of Jimma University on undergrad female students (41.9%). This variation could be due to the high promotion of family planning service including EC in the study area and the presence of clubs in the school which works on prevention of HIV/AIDs and unwanted pregnancy among youth.

In this study pills are the most widely known EC method almost by all respondents who knows EC. The most common source of information was from health workers education (70.8%), from mass media 40.9%, peer discussion 30.5%. The study done at mekelle University revealed that the most common source of information were friends and peer discussion in 36.5%, mass media 22.8% and about 23% were from health institutions. The variation in this study is probably from, most of the study participants were from urban, provision of information and service by HEWs by home to home service and by provision of information by students from MU through community based education program. With regard to the place where to get the service, 78.9% from health institution, 31.2% from clinics and 47.7% from pharmacies which is almost similar with the study done at Kenya Nairobi which is 84% from hospital, 48% from pharmacies and 30% from clinics.

## Recommendation

### Health profession and teachers

Collaborate to provide health information to increase awareness about correct timing of emergency contraceptive method among school students. Give a considerable attention in family planning counseling as a backup service to solve short coming problems of females. Should provide health education in the catchment area, by giving special emphasis on the prevention of unwanted pregnancy and its consequences by providing both health information and emergency contraceptive service.

### School club

Should Strength IEC in the area on sexual and reproductive health, with special emphasis to ECs including different family planning methods will be a life-saving procedure for youth, females and providing continuous education to the community.

### Researchers

Further more depth research is needed to show better options and provide timely solutions on knowledge and attitude of providers and male partner to make EC service assessable for all youths.

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