

## ORIGINAL ARTICLE

**Knowledge and practice on emergency contraception among high school students of Jimma University Community High School, Jimma, South West Ethiopia**Tadesse Alemu<sup>1</sup>, Teklebrehan Tema<sup>2</sup>**Abstract**

**Background:** Emergency contraception (EC) reduces the risk of occurrence of unwanted pregnancy in situations of unprotected sexual intercourse.

**Objective:** To measure and analyze the knowledge and practices of EC among female students of Jimma University Community High School.

**Methods:** A cross-sectional descriptive study involving all grade 9-12 female students enrolled at Jimma University Community High School in Jimma town, South West Ethiopia was undertaken from February 26-29, 2006.

**Results:** There were a total of 106 respondents, the majority 95(89.6%) being in the age group 14-17 and few were between the age of 18-21(10.3%). Most of them were single 94(88.7%). Seventeen(16%) were sexually active, five (4.7%) have given a history of previous pregnancy and two had a history of induced abortion. Sixty eight (64.1%) had heard about EC and the most cited sources of information were school teachers and health professionals. Out of those who have heard about EC, only 13(19%) of the respondents were able to tell correctly the recommended time for EC use (i.e. within 72 hours of unprotected sex). Awareness about EC was not found to be associated with either age or educational level ( $p>0.05$ ). EC use among those with prior knowledge was found to be very low 3(4.4%).

**Conclusion:** This study has shown that though a significant number were practicing sex whereas the general awareness, detailed knowledge and practice of EC among adolescent high school students are very low. It is recommended that adolescent reproductive health/family planning programs be initiated/expanded in schools. Furthermore ensuring on safer sex practices and access to adolescent friendly EC information and services should be promoted.

**Keywords:** Emergency contraception, knowledge, practice, family planning

---

<sup>1,2</sup> Jimma University

## Introduction

Many young people today start sex before marriage, and they face more risk of unwanted pregnancy (1). Between 20% and 60% of pregnancies to women younger than twenty are unplanned (2). Over 133 million births occur in the world annually, one in four (33 million) of which are estimated to be unintended, either mistimed or never wanted. In addition, an estimated 46 million induced abortions are preformed annually with 78,000 deaths each year (3).

A large proportion of unmarried adolescents are sexually active; although many of them have infrequent sexual intercourse. In many cases, they are irregular users of contraception or do not use a reliable contraceptive method at all, exposing themselves to unwanted pregnancy (4). Studies in eight sub-Saharan countries have found out that 20% to 47% of adolescent women become pregnant before marriage (4).

Other factors that enhance adolescents' risk of pregnancy related complications include poverty, malnutrition, lack of education and lack of access to prenatal, intra natal and post natal care (5). Although Emergency contraception (EC) has existed for the last 30 years, it has remained relatively unknown worldwide (6). Most researchers have pointed out that lack of knowledge of the method is the major barrier to use (7).

In Ethiopia, young people lack knowledge about the use of EC, and they do not have information about the service, and are unaware of the availability of a dedicated product. Moreover, there are few data available on adolescent's knowledge, attitudes and practices towards EC in the country. This study aimed at assessing the knowledge, attitudes and practices of high school adolescent girls towards EC and associated factors.

## Subjects and Methods

The study was conducted in Jimma University community high school, situated in Jimma town 335 km away from Addis Ababa, in south west Ethiopia. Located in the main university campus, the school has a total of 1340 students among which 765 are males and 575 are females in the study year. Of these, there were a total of 193 male and female students who were attending grade 9-12. 106 of them were females while the rest 87 were males.

The town has four family planning service providing sites: one referral hospital, one health center, one health station and one non-governmental clinic. A cross sectional study was conducted among all grade 9-12 students who were enrolled during the study period February 26 to 29, 2006. Data was collected using self administered structured questionnaire and completed by the respondents.

The questionnaire included questions on the background information of respondents and their knowledge and practice of EC. Data analysis was performed using SPSS statistical software. Frequency tables and graphs were used to express the results. A p-value of less than 0.05 was considered significant.

## Results

There were 106 female respondents and almost all 95 (89.62%) of respondents were within the age group of 14-17 years and 11 (10.13%) were with in the age group of 18-21 years. The majority 94 (88.67%) were single. Most 52(49.05%) were Orthodox Christians. Muslims, Protestants and Catholics accounted for 22(20.7%), 22(20.7%) and 10(9.4%), respectively (Table. 1.)

As shown in Table 2, 17 (16.1%) were found to be sexually active, the majority being from junior high school 11(64.7%) and the rest were from senior high school, 6(35.3%). Five (4.7%) gave a history of previous pregnancy; the majority of which were currently enrolled in grade 12. Among the five previous pregnancies reported; three were said to have been terminated early in pregnancy.

Sixty-eight (64.1%) of the total respondents were found to be aware of the existence of EC. The majority, 63 (92.6%) were young adolescents (14-17) and were in grade 9. However, knowledge of EC were not found to be statistically associated with either age or level of education ( $p > 0.1$ ) (Table 3).

Knowledge concerning the timing of EC usage was very low, only 13(19.1%) of the respondents who were previously aware of EC were able to mention the correct timing, i.e. within 72 hours of unprotected sex (Table 4).

**Table 1: Socio-demographic characteristic of female students of Jimma University Community School (Grade 9-12), Feb. 2006, Jimma, Ethiopia (n=106).**

Characteristics	No	%
<b>Age</b>		
14-17	95	89.63
18-21	11	10.37
<b>Marital status</b>		
Single	95	89.62
Married	7	6.60
Divorced	3	2.84
Widowed	1	0.94
<b>Residence</b>		
Urban	83	78.31
Rural	23	21.69
<b>Religion</b>		
Orthodox	52	49.05
Muslim	22	20.75
Protestant	22	20.75
Catholic	10	9.45
<b>Educational status</b>		
Grade 9	61	57.54
Grade 10	8	7.55
Grade 11	26	24.53
Grade 12	11	10.38

**Table 2: Previous sexual experience of female students of Jimma University Community School by educational level, Jimma, Ethiopia (n=106).**

Education level	Previous sexual experience				Total
	Yes		No		
	n	%	n	%	
Grade 9	9	8.49	52	49.05	61
Grade 10	2	1.89	6	5.66	8
Grade 11	4	3.77	22	20.75	26
Grade 12	2	1.89	9	8.49	11
Total	17	16.04	89	83.96	106

The most cited sources of information were school teachers and health professionals. Overall the practice of EC among all of the respondents was significantly low 3(2.8%).

## Discussion

The result of this study has shown that two thirds (64.1%) of the total respondents were aware of the existence of EC. This figure is much higher than those reported by Ammanuel from Jimma, Ethiopia (50.1%) (8), 23% from USA and 18% from Mexico, but it was lower than those reported from a UK (85%) high school adolescent's study (9).

Similar to what many other studies have shown; our young female students also lack specific details like dose and time frame of the method (19%). This is low when compared with the study done in UK, 30%<sup>9</sup>. The prevalence of EC usage was 2.8%, which is quite very low when compared to a study done in UK, 62% and even in Ethiopia 11.5%(8).

This study has shown no significant association of EC use with level of education which was contrary to many other studies.

The commonest source of information about EC in this study were school teachers and health professionals followed by friends and family and was consistent with USA and Scotland studies which have shown 39% school, 22.6% friends 17.5% family and 9.2% health professionals(9).

Given a high prevalence of sexual activity 16%, very low awareness of EC and lack of an appropriate knowledge on the specifics of the method among the study group; it was not surprising to find a 4.7% past pregnancy rate and a higher tendency to practice unsafe abortion (60%).

When source of information about EC in this study was explored, health institution (mainly FGAE and Marie Stops) took the lead followed by partner/neighborhood radio and school, respectively.

Table 3: Awareness of EC by educational level among female students of Jimma university community school (Grades 9-12) Feb.2006, Jimma, Ethiopia.

Awareness of EC	Ever heard of EC				Total	X <sup>2</sup>	p. value
	Yes		No				
	No	%	No	%			
<b>Age</b>							
14-17	63(60.96)	66.3%	32(34.05)	33.9	95	1.068	p>0>1
18-21	5(7.06)	45.45	6(3.94)	54.5	11		
Total	68		38		106		
<b>Education</b>							
Grade 9	43(39.13)	70.5	18(21.87)	29.5	61		
Grade 10	5(5.13)	62.5	3(2.87)	37.5	8		
Grade 11	12(16.68)	46.5	14(9.32)	53.45	26	5.183	p>0>1
Grade 12	6(7.056)	4.5	5(3.94)	45.45	11		
Total	68		38		106		

Table 4: Awareness of EC timing among female students of Jimma university community school (Grades 9-12) Feb. 2006, Jimma, Ethiopia.

Time when to take EC	No	%
After 24 hrs of unprotected sex	42	61.76
Any time after unprotected sex	11	16.18
Before unprotected sex	2	2.94
Within 27 hrs of unprotected sex	13	19.12
Total	68	100.00

Although the number of respondents who got information on EC was very low to make an inference, still the role of NGO's working on reproductive health is not undermined. But it didn't mean that efforts of these organizations were satisfactory; rather it needs to be strengthened.

We therefore recommend; a combination of providing sex education in school, including provision of EC information to students at an early age and make contraceptives widely available. School clinics should play a major role in this activity.

### **Acknowledgements**

We would like to acknowledge Population Council (EC Afrique) and the Ethiopian Society of Obstetricians and Gynecologists (ESOG) for the financial support. Our appreciation also goes to the teachers, students and library staff of Jimma University for helping in the research work. Last but not least I would like to express my appreciation to W/o Zinashwork Nigussie for her secretarial support.

## References

1. Proceedings of the Canadian Pharmacists Association Conference, 2002, Emergency Contraceptive - question and answer [www. Pharmacista. org](http://www.Pharmacista.org).
2. Harvey B J, Sherman C, Pettit D. Women's experience and satisfaction with emergency contraception, IFFPP, 1999, vol. 31: 273.
3. Pavin L. Emergency Contraception. Canadian Medical Association Journal Sep, 2003 vol. 169, number 6:230-244.
4. Nicole A. Adolescent contraceptive. Western Journal of Medicine; 1996; Dec; 21:211-215.
5. World Health Organization (WHO), 1998. Emergency Contraceptives - a guide for service delivery.
6. A VSC International 2004. Meeting the Challenge: health sector reform and reproductive health in transition.
7. Tigist A. Emergency contraception: assessment in Black Lion Hospital student thesis (unpublished), 1999.
8. Emmanuel D. Awareness of Emergency Contraception. Knowledge, attitude, practice (KAP) in high school students in Jimma. Student's thesis (unpublished).
9. Albaria SC, Graham *et al.* Emergency Contraceptives in adolescent teenager users. BMJ; 312:1566-1569.