

Knowledge and Practice of Emergency Contraceptives among Students at Ambo Techniques College, Ethiopia

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Abstract

Background: In Ethiopia, particularly, in the study area data on knowledge, attitude and practice of emergency contraceptives among youth in school and college level is lacking. This could be evidenced by the high rates of unwanted pregnancies as well as sexually transmitted infections in these age groups. Therefore, in this study, we are meant to fill such gap in the study area.

Methods: A cross-sectional survey was conducted among 305 female students at Ambo Technique College in Ethiopia from March to September 2013.

Results: In this study, 80.7% of the respondent had ever heard about Emergency Contraceptives (EC). Yet majority of the respondent (84.6%) had not used the method despite the significant sexual practice they made. About 77.4% of the students have positive attitude towards EC.

Conclusion: The respondents in this study had high level of knowledge and positive attitude about EC yet very low level of utilizing the method. Therefore, much work need to be done to identify the reasons behind this lower utilization rate and prompt addressing to increase its up take to the acceptable degree. Lastly, responsible stakeholders have to device structured reproductive health education at college level as one of the tool to achieve the country's millennium development goal related to family planning.

Keywords: Emergency contraceptives; Knowledge; Attitude; Practice; Ambo TVET

and with the use of IUCDs unwanted pregnancy can be prevented by as much as 99% [3].

Introduction

Ethiopia has one of Africa's youngest populations at the beginning of the 21st century. About one out of every four females in Ethiopia is 16-24 yrs old. This is the largest group of young people ever in the region to enter adulthood. Helping Ethiopian youth to make a healthy transition to adulthood is critical to the country's development and prosperity of its future population. Worldwide young women and men suffer a disproportionate share of unplanned pregnancies, Sexually Transmitted Diseases (STD) including HIV and other serious reproductive health problems. To alleviate this problem, increasing accessibility and awareness of contraception methods including emergency contraceptives to these vulnerable young population is a critical step to be implemented [1,2].

Emergency contraception is a kind of contraception method that is used in the prevention of pregnancy following an episode of unprotected intercourse during the fertile period. It has the potential, as the last resort, to avoid unwanted pregnancy and therefore abortion; a desirable goal especially when abortion is illegal. Oral contraceptive pills and Intrauterine Contraceptive Devices (IUCDs) are mainly used as emergency contraceptives. When used within 72 hours after sexual intercourse, pills have the capacity to prevent pregnancy by 75-85%

Statement of the problem

Unwanted pregnancy leading to unsafe abortion is one of the most important causes of maternal morbidity and mortality. Unsafe abortion is a major medical and public health problem in Ethiopia [4]. Ethiopia has a high incidence of unwanted pregnancies and incomplete and unsafe/septic abortions, particularly among adolescents. For this reason, it is reported that about four million adolescents experience induced abortion each year [5].

Moreover, Ethiopia is the second most populous country in Africa, with an estimated population of 93,877,025 despite the substantial increase in the use of modern contraceptives from 6% in 2000 to 27.3% in 2011. One of such methods is Emergency Contraceptives (EC) which was introduced in Ethiopia in 1997. There is no national data exist on the percentage of Ethiopian women who have used EC. However, studies in different parts of the country show very low utilization rate (as low as 10%) of the method despite the significant proportion of youth have ever had sex in their life time. The most frequently reported reasons for the non-use of the method are fear of side effect and lack of information (knowledge). The knowledge of sexually active unmarried women, in this regard it is found to be 41% nationally which is very much lower than what is expected to be [6-9].

The potential of EC to prevent unintended pregnancy is well documented but the awareness & use of the method in our country is poor. Scientific evidences shows that three fourth of unplanned pregnancy can be prevented by using emergency contraceptives after unprotected sexual intercourse [10]. However, the problem of unintended pregnancy still exists despite the fact that different modern contraceptives exist worldwide. This could be attributed to the lack of information and negative attitudes towards the method [11,12]. In light of this, we are interested in examining problems concerning knowledge, attitude and practice of emergency contraceptives among Ambo TVET female students.

Significance of the study

The study is searching for facts and information's on the knowledge, attitude and practice of emergency contraceptives which is believed to be the second opportunity to prevent unintended pregnancy after unprotected sexual intercourse among female adolescent and young adult. Therefore, the findings can benefit governmental and non-governmental organization working to provide reproductive health service of these populations. Furthermore, Ambo health office and non-governmental organization found around the study area and also in Ethiopia like family guidance associations which are providing emergency contraceptive service can utilize the result of this study as a base line data in planning awareness creation programs for female college students.

Methods and Materials

Study design

A descriptive cross sectional study was used to assess knowledge, attitude and practice of students in the study area.

Study area and period

The study was conducted from March to September 2013 at Ambo Technical and Vocational Educational Training College (TVETC) in Ambo town. Ambo town is located at about 116 kilometers to the west of the capital city; Addis Ababa. Ambo Technical and Vocational Educational Training College (TVETC) was established in 1994. There are a total of 2043 (1028 male and 1015 female) regular students enrolled in the academic year 2012/13. The students attending this college are selected from different locations giving an opportunity for the generalizability of the findings to versatile population groups. All Female regular students of age 15 years or more were included. We excluded those who are absent from class on the day of data collection and not willing to participate in the study.

Sampling and data collection procedure

Simple random sampling techniques were applied to select 305 from 1015 female regular students enrolled to Ambo TVET College in 2012/13 academic year. List of students from all departments was prepared and given a number from 1 to 1015 then the study unit is selected by using table of random numbers. Data collection was carried out by trained four clinical nurses up on supervision of the principal investigators. Self-administered questionnaires were used as the tool for data collection. In order to minimize bias due to language barriers, the questionnaires which originally prepared in English was translated to local language of the study participants called Afan Oromo version. This tool contains three important parts:

sociodemographic information, sexual history and questions that accesses knowledge about, attitude towards and practice of emergency contraceptives. To assure true responses by the student, collage teachers and authorities didn't involve in administering the questionnaires.

For the purpose of the present study, we had defined Knowledge as a study subject who responded correctly to more than four out of six emergences contraceptive awareness related questions. Attitude as a subject of study who had a favorable response to more than 3 out of 5 attitude statements and Practice implies subjects who had ever used emergence contraceptive once or more in their life time. Sexually active when sexual intercourse is practiced in the past six weeks. Lastly, ever had sexual intercourse was defined as an individual who had practiced sex once or more in her life time.

Data processing and analysis

Data was analyzed using SPSS version 20.0. Then descriptive statistics are performed. Finally, the results were organized in number and percentage for categorical data while as mean and range for continuous variables and presented using narrative statements and tables.

Ethical consideration

Ethical clearance was obtained from Ambo University, College of Medicine and Health science research and technology transfer team. Then informed consent was obtained from each and every study participant before data collection began. Participants filled the questionnaire privately and all necessary precautions' were taken to maintain the confidentiality of the information to be collected.

Results

Socio-demographic characteristics

We had got 100% response rate in this study. As shown in Table 1, the age of study participants mostly (73.1%) falls in the range of 15 to 35 years. Most of the respondents (59%) were followers of Orthodox Christianity followed by Protestants who accounted for 20.6%. Again, majority (86.5%) of the respondents were not married and almost all Oromo in ethnicity.

Characteristics	Number	Percent
Age in years		
15-19	223	73.1
20-35	82	26.9
Marital status		
Married	41	13.5
Unmarried	264	86.5
Religion		
Orthodox	183	60.0
Protestant	63	20.6
Muslim	59	19.4

Ethnicity		
Oromo	303	99.3
Other	2	0.7
Year of study		
Level II	92	30.2
Level III	209	68.5
Level IV	4	1.3

Table 1: Socio-demographic characteristics of the respondents, Ambo, Ethiopia, 2013.

Sexual history and pregnancy related issues

As it can be seen from Table 2, history of recent sexual intercourse of the respondents was very low (1.6%). Surprisingly, all of them who had sex during the survey responded that they have not used condom. A total of 26 respondents replied that they had been pregnant at least once previously of which unwanted or unplanned pregnancy constituted 76.9%.

Characteristics	Number	Percent
Ever had sex during this month		
Yes	5	1.60
No	300	98.4
Ever used condom at this time		
Yes	0	0
Ever been pregnant		
Yes	26	8.5
No	279	91.5
Unwanted pregnancy (n=26)		
Yes	20	76.9
No	6	23.1
Induced abortion (n=26)		
Yes	2	7.4
No	24	92.6

Table 2: Sexual and reproductive health characteristics, Ambo, Ethiopia, 2013.

Knowledge about EC

Table 3 shows that in this study, 80.7% of the respondents have heard about products that can be used for emergency contraceptives. Among those who heard about the products, they report that the major reason to use those products is rape (41.1%). More than half of respondents (52.9%) reported that the correct time interval to use emergency contraceptives was 72 hours. When asked about specific types of emergency contraceptives, 54.4% mentioned pills and 25.2% mentioned injectable while 16.4% mentioned IUCDs. The major

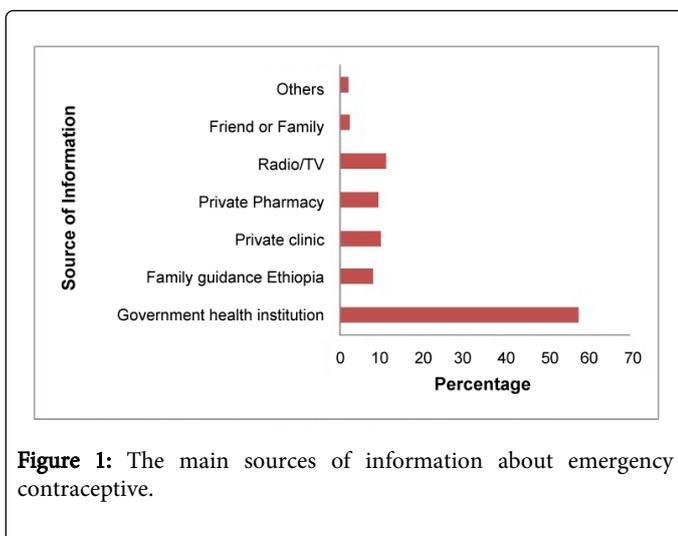
source of information that is known by the respondents was government health institutions (about 60%) followed by media (radio/television) as depicted on Figure 1.

Characteristics	Number	Percent
Ever heard of product for EC		
Yes	246	80.7
No	59	19.3
Perceived reasons to use those products (n=246)		
Condom breakage/slippage	60	24.4
Intercourse without contraceptive	60	24.4
Rape	101	41.1
Others	25	10.0
Time interval to use EC		
12 hrs	18	7.3
24 hrs	29	11.8
48 hrs	32	13.0
72 hrs	130	52.9
1 week	8	3.2
Other	29	11.8
Type of EC ever heard		
Pills	136	54.4
Injectable/Depo	63	25.2
IUCD	41	16.4
Others	10	4
Do you know where to get information about EC		
Yes	262	85.90
No	43	14.10
Do you know where EC is available		
Yes	265	88.33
No	35	11.67

Table 3: Knowledge about EC of the respondents, Ambo, Ethiopia 2013.

Utilization of EC

As it is shown in Table 4, only 12.5% respondents reported that they had used emergency contraceptive methods previously. All participants who had used emergency contraceptive methods reported that the methods were effective in protecting unwanted or unplanned pregnancy. Majority of the respondent (73.7%) also indicated that they got the service of emergency contraceptives from the government health institutions followed by family guidance Ethiopia (13.2%).



Characteristics	Number	Percent
Ever used EC		
Yes	38	12.5
No	267	87.5
Result of using EC (n=38)		
Effective/no pregnancy	38	100
Not effective/pregnancy	0	0
Where did you get service EC (n=38)		
Government health institutions	28	73.7
Family guidance Ethiopia	5	13.2
Private clinic	3	7.9
Community pharmacy	2	5.2

Table 4: Utilization of EC by respondents, Ambo, Ethiopia, 2013.

Attitude toward EC

Table 5 shows that 77.4% of the respondents have positive attitude towards emergency contraceptives. Majority of the respondents (about 69.8%) do not believe that emergency contraceptive help to induce abortion. About 85.6% of the respondent agreed to advice the future use of emergency contraceptives. During unprotected sexual intercourse. However, a significant proportion of respondents (33.1%) reported that induced abortion is preferred than using emergency contraceptive.

Characteristics	Number	Percent
Positive attitude about EC		
Yes	236	77.4
No	69	22.6
Do you support EC		

Yes	244	80
No	50	16.4
No response	11	3.6
Do you belief EC help induce abortion		
Yes	92	30.2
No	213	69.8
Do you advice to use EC		
Yes	261	85.6
No	44	14.4
Induced abortion is preferred to EC		
Agree	101	33.1
Disagree	204	66.9

Table 5: Attitude toward EC of the respondents, Ambo, Ethiopia, 2013.

Discussion

The present study has generated data of considerable importance regarding the knowledge of college students on EC, their attitude toward the method and the extent to which they have utilized it since they started sexual intercourse. The findings will be valuable input for policy makers and other stakeholders working on sexual and reproductive health services in the region for planning and provision of EC services for the youth with unmet need of the method under consideration. Accordingly, these findings are discussed below in view of national and international data previously available to further consolidate the applicability of the findings.

In Ethiopia, it is indicated that only 19% of all women (41% unmarried) had knowledge about ECs [7]. In previous work conducted by Jimma et al. on Ambo University female students, it was found that 62.5% of the students have information about the method. The present study showed even higher knowledge for the respondents than our previously published work [13] regardless of the fact that university students are believed to have better overall knowledge than college students. This is similar to the findings of other studies conducted in among the biggest and oldest universities of Ethiopia like Hawassa University, Addis Ababa University and Jimma University [8,14-17]. In India it is reported that 90.3% college students have ever heard about EC [18]. These findings highlight the need for further study to find out the attributes of college students that could responsible for increasing their knowledge.

Correct timing is the single most important determinant of EC effectiveness; the shorter the time between unprotected intercourse and utilization of EC, the better will be its effectiveness. In this study, 52.9% of the respondents mentioned the correct time (maximum 72 hrs) since the unsafe sex which is comparable to our previous work and Hiwot et al. [13, 14]. However, this is higher than that of Anteneh et al. (35%) and lower than the 68.8% obtained by Vijender et al. [18].

Different studies identified different sources providing information on EC. Accordingly, the most commonly stated sources of information for this type of contraception include media [13], health institutions [3], school [14], and friends as well as media [15], TV, magazine and

internet [18]. The present study showed government health institutions to be the most common source of information stated by respondents.

These evidences clearly show that method mix (combination of TV, magazine and the like) has to be used to make EC information as widely disseminated as possible so as to increase the awareness of youth and adolescents in universities and colleges as well as the communities at large about this kind of contraception.

The prevalence of sexual practice among university and college students is known to be high which is mostly unprotected yet the proportion of this wing of population found to use EC is very low as explored by different studies. It ranges from 4.9% to 36.5% for Ethiopian students [13-15]. Similarly, lower utilization rate of 12.5% had been obtained in the present study. Among women undergoing abortion, the utilization is even lower to the level of not existing [3,16]. This very lower utilization rate of the method in all cases is despite the respondents' acceptable level of knowledge and high degree of sexual practices. For this, different scholars put different reasons for EC non-use including but not limited to fear of side effects, fear of becoming infertile after use, lack of information, religion, culture, partner disagreement, fear of being seen by others, inconvenient service delivery and many more [3,9,17]. Therefore, campus wide well organized reproductive health education is timely and a must to be implemented for this group in order to increase the uptake of the method so as to avoid the high rate of unwanted pregnancy associated with it.

In contrast to what have mentioned for extent EC utilization, most studies showed that female students have favorable attitude for the method. We have come across positive attitude of 53% to 100% during our literature review [3,13-16]. The finding of this study also falls in this range. However, this doesn't mean that we should not have to work on this issue. This is because there are still many misconceptions and wrong belief like it increases risky behaviors, fear of misuse, propagate HIV/AIDS, discourage the use of other methods, causes birth defect and the like [3,13,14]. Hence all these need to be addressed to make the knowledge of, attitude toward and utilization of EC to go side by side to minimize unwanted pregnancy and its complications among college and university students which are now constituting the major proportion of world population.

Lastly, as other cross-sectional studies, our study is limited by the fact that we couldn't establish causation among any variables. Secondly, there could be some degree of biasness as the study was based on self-reported questionnaires.

Conclusion

In general, students in this college have acceptable level of general knowledge and attitude. However, their utilization of emergency contraceptives is very low secondary to different myths and misconceptions that need to be addressed soon by the government and other responsible stakeholders. Moreover, method mix has to be used to make EC information as widely disseminated as possible to increase the awareness of college and university students about the method. Lastly, campus wide well organized reproductive health education is timely and a must to be implemented for this group in order to increase the uptake of the method.

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