



Knowledge, Attitude and Practice of Emergency Contraceptives among Ambo University Female Students, West Showa, Ethiopia

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Abstract

There is scarcity of data on the degree of emergence contraceptives utilization, awareness of and attitude toward this method in Ethiopia though long times have passed since its introduction. Therefore, this study was meant to produce more of such data for the success of family planning related millennium development goals of the country. A cross-sectional survey was conducted on 350 female students of Ambo University who were sampled using stratified random sampling. Odd ratio (OR) & 95% confidence interval (CI) were used to measure association among variables. We showed that 62.5 % of the study participants had information about EC where only 49.3% of them knew the correct time to take the first dose of EC pill after unsafe sex. About 58% of them had positive attitude in advocating the use of EC for prevention of unintended pregnancy following unprotected sexual intercourse. Less than half of the respondents had ever used EC where majority (33.8%) preferred to get the service from private health sectors. The respondents' knowledge was generally good as compared to the previous reports available in the country. There was an improved attitude with very low level of EC utilization in contrast to other studies. Hence, a well organized university based reproductive health (RH) services are a must to overcome these problems. Moreover, it would be better if RH is given as one course at all universities in Ethiopia.

Keywords: Emergence contraceptive, knowledge, attitude, utilization, Ambo, Ethiopia

Introduction

Worldwide 85% of the 1.7 billion young people are living in developing countries. Adolescents constitute a significant percent of these population in which about 15 million of them give birth about one quarter of which got an abortion each year¹.

This could be among the major reasons for the approximately half million maternal deaths occurring each year and the majority of maternal deaths that occur in third world countries^{2,4}. In Ethiopia, unsafe abortion contributes to about 22-54% of direct obstetric deaths³. However, if unmet needs for family planning like emergence contraceptives are widely available, millions of these death events could be reversed⁵.

There are different methods of EC including emergency contraceptive pills (ECP) are widely being used and intrauterine devices. ECPs in turn classified into two: combined (estrogen and progestin) oral contraceptive pills (COCP) and progestin only pill (POP)⁶. Regarding timing of administration relative to unprotected sexual intercourses, the first dose should be taken within 72 hours of this event to effectively avoid unplanned pregnancy. This is because as the time goes on from the time of unsafe sex, its effectiveness significantly decreases. Accordingly, if ECP is taken within the standard time limit, it can be effective from 75 % - 89 %⁷.

Knowledge level of women about this method of contraception, however, is varied. For instance some women think that ECPs do induce abortion. In contrary to this thought, ECPs rather help prevent the need for abortion. Similarly, they also consider these pills to be dangerous to their health. However, there are no medical conditions that make emergence contraceptive pills unsafe for any woman as it is to be used for very short period of time^{7,8}.

The Ethiopian Federal Ministry of Health introduced emergence contraceptive service in 2005. Regardless this fact, rate of abortion and unplanned baby is still significant in reproductive age group women secondary to unsafe sex. There are many reasons for this. For one reason, the method remains poorly known with many women and the other fact is the fear to access the drug from the sources as it is a cultural taboo in Ethiopia to have sex before marriage⁹. Therefore, this study was designed to primarily examine the level of awareness, and use as well as attitude toward the use of EC among female students at Ambo University. This study was also meant to identify factors which can be associated with these variables.

Material and Methods

This study was a descriptive cross-sectional survey conducted from January through May 2013 on 350 sampled female students of Ambo University which is found in Ambo city, in

Ethiopia. Students of this university come from all corners of the country consisting of different nations and nationalities giving an opportunity for the generalizability of the study findings. For sampling, simple random sampling was employed after stratifying the students in to health and non health sciences strata. Then pre-tested self administered structured questionnaires were used for data collection. It includes information on socio- demographic characteristics, awareness, attitude and utilization of EC.

In this paper, the study subjects who have positive outlook and no concern towards ECs and responded the attitude questions positively were considered to have a positive attitude towards ECs. The respondents are considered to have knowledge (have awareness) if they answer majority of the knowledge questions correctly. Practice defined as ever use of EC on the basis of their knowledge when the study subjects are exposed to unprotected sexual intercourse to prevent an intended pregnancy.

Data Analysis: Data analysis was done by statistical package for social sciences (SPSS) version 20.0. The results of categorical variables were placed as frequencies and percentage. The possible association between dependent and independent variables was determined using chi-square (χ^2) test. For significance, P-value < 0.05 was considered in all cases.

Ethical Consideration: Ethical approval was obtained from the Research, Knowledge and Technology Transfer team office of college of medicine and health sciences at Ambo University. In addition, verbal consent was secured from each participant. The confidentiality of all participants was kept strictly.

Results and Discussion

Characteristics of the Study Participants: In this study the response rate was 92.9% (325 participants gave their full response out of 350). Accordingly, all respondents were in the age range of 18 to 28 years in which majority 195(60%) were below the ages of 22 yrs in this range. About 66.5% of the respondents were orthodox Christians. One hundred thirty seven (42.2%) of the study participant were from Oromo ethnic group. The greater majority of the participants 290(89.2%) had never been married and were from the rural part 199 (61.2%) of the country. See table 1 for better illustration.

Knowledge of the Respondents about Emergency Contraception: As shown on table 2 below, 203(62.5 %) of the respondents had ever heard about emergency contraception in their life. Of these, 94 (46.3%) mentioned pills while insignificant number 6(3%) of the respondents mentioned Intra uterine devices (IUD). Media (television /radio) 61(30.1 %) followed by family/friends 45(22.2%) were identified to be the major sources of information for the respondents to know about EC. Regarding the time limit, 100 (49.3%) of the respondents stated that 72hrs is a recommended time limit whereas

30(14.8%) of them didn't know the time limit of EC use after unprotected intercourses. When come to indication for EC, 43 (21.2%) mentioned for all raped individuals, 14(6.9%) only during condom failure, 18(8.9%) only for missed regular contraceptive pills, 38(18.7%) after unprotected intercourse only and 22(10.8%) don't know the indications for EC at all.

Table-1
Socio-demographic characteristics of respondents, January - May 2013, West Showa, Ethiopia

| Variables | Frequency | Percentage |
|--|-----------|------------|
| Age (in year) | | |
| 18-22 | 195 | 60% |
| 23-27 | 118 | 36.3% |
| >=28 | 12 | 3.7% |
| Marital status | | |
| Single | 290 | 89.2% |
| Married | 35 | 10.8% |
| Religion | | |
| Orthodox | 216 | 66.5% |
| Protestant | 53 | 16.3% |
| ^a Others | 56 | 17.2% |
| Place of residence | | |
| Urban | 126 | 38.8% |
| Rural | 199 | 61.2% |
| Ethnic origin | | |
| Oromo | 137 | 42.2% |
| Amhara | 92 | 28.3% |
| ^b Others | 96 | 29.5% |
| Respondents' College | | |
| Health science | 34 | 10.5% |
| Non health science | 291 | 89.5% |
| Respondents' Year of study | | |
| Year I/II | 191 | 58.8% |
| Year III & Above | 134 | 41.2% |
| The economics status of the family (in Ethiopian Birr) | | |
| <=200 | 13 | 4% |
| >200 | 117 | 36% |
| I don't know | 195 | 60% |

a; Catholic, pagans, Adventist, Muslim b; Tigre, southern nations and nationalities, somali

Utilization of EC by the Respondents: On table 3 it is indicated that 74(36.5%) of the respondents had utilized emergency contraceptives. Among these, 55(74.3%) of them had used pills while 6(8.1%) respondents used IUD. Frequency of EC use had also been explored where majority (60. %) used it only once in the last two months whereas about 14.9% used several times. Rape was the number one reason 25(33.8%) and unprotected sex was the least contributing factor 10 (13.5%) for EC use by respondents. Thirty (40.5%) of the EC users reported that they had got the service from pharmacy whereas only few of them 8(10.8%) obtained this service from youth center. EC utilization was strongly associated with both knowledge

($p < 0.001$) and attitude ($p < 0.01$) of the respondents in which well informed individuals and those who had positive attitude are more likely to utilize the service.

method 15 (18.2%), fear of drug side effect 9 (10.8%), fear of teratogenicity when pregnancy occurred 9(10.8%), and religious reason 7(8.4%).

Table-2
Knowledge of the Respondents about Emergency Contraception, January-May 2013, West Showa, Ethiopia

| Variable | Frequency | Percentage |
|---|-----------|------------|
| Ever heard of EC | | |
| Yes | 203 | 62.5% |
| No | 122 | 37.5% |
| Type of EC ever heard (203) | | |
| Pills | 94 | 46.3% |
| Intra uterine device(IUD) | 6 | 3% |
| Others | 103 | 50.7% |
| The time limit for EC(203) | | |
| 72 hrs | 100 | 49.3% |
| 24 hrs | 29 | 14.7% |
| Immediately after sex | 30 | 14.8% |
| Five days/ in a week | 8 | 4% |
| After cessation of menses. | 5 | 2.4% |
| I don't know | 30 | 14.8% |
| Source of information for respondents (203) | | |
| TV/radio | 61 | 30.1% |
| Health professionals | 16 | 7.9% |
| Family /Friends | 45 | 22.2% |
| Health institution | 23 | 11.3% |
| Formal Education | 36 | 17.7% |
| Reproductive Health Clubs | 7 | 3.4% |
| All of the above | 15 | 7.4% |
| Indication for EC by respondents (203) | | |
| Forced sex(rape) | 43 | 21.2% |
| Condom broken | 14 | 6.9% |
| Missed pills | 18 | 8.9% |
| Unprotected sex | 38 | 18.7% |
| All of the above | 48 | 23.5% |
| Don't know its indication | 22 | 10.8% |

a; Norplant, Depo-provera, Antibiotics

Attitude of the Respondents toward EC Use: Table 4 shows the overall attitude of the respondents toward EC. In this regard, 126 (62.1%) of those who had an awareness of EC have a plan to use it in case there will be a need. Surprisingly, many 43(33.8%) of them preferred to get the service from private sectors, while very few 11(8.7%) prefer youth center to get this service. Moreover, 118 (58.1%) of those who aware about EC had intention to advocate the method to be used by all women when needed and the rest of them mentioned only some circumstances like rape 37 (18.2%), to young people 30 (14.8%) and married women only 18 (8.9%). Reasons identified for not advocating the use of EC method to the needy women include but not limited to increased risky sexual behaviors 23 (27.7%), fear of propagation of HIV 20 (24.1%), misuse of the

Table-3
Utilization of EC by Respondents, January-May 2013, West Showa, Ethiopia

| Variable | Frequency | Percentage |
|---------------------------|-----------|------------|
| Ever used EC (203) | | |
| Yes | 74 | 36.5% |
| No | 129 | 63.5% |
| Type EC used(74) | | |
| Pills | 55 | 74.3% |
| IUD | 6 | 8.1% |
| Others | 13 | 17.6% |
| Source of EC | | |
| Public | 14 | 19% |
| Private | 22 | 29.7% |
| Pharmacy | 30 | 40.5% |
| Youth center | 8 | 10.8% |
| Frequency of EC used (74) | | |
| Once | 45 | 60.8% |
| Twice | 18 | 24.3% |
| ≥Three times | 11 | 14.9% |
| Reason for EC used(74) | | |
| Forced sex | 25 | 33.8% |
| Condom slippage | 16 | 21.6% |
| Un protected sex | 10 | 13.5% |
| Missed pills | 23 | 31.1% |

Table-4
Attitude of the Respondents toward EC Use, January-May 2013, West Showa, Ethiopia

| Variable | Frequency | Percentage |
|---|-----------|------------|
| Making available EC attitude | | |
| To all women who need it | 118 | 58.1% |
| To married women only | 18 | 8.9% |
| To youth only | 30 | 14.8% |
| To raped only | 37 | 18.2% |
| Intention of future use | | |
| Positive | 126 | 62.1% |
| Negative | 77 | 37.9% |
| Preferred source for EC use | | |
| Public health sector | 35 | 27.6% |
| Private health sector | 43 | 33.8% |
| Pharmacy | 38 | 29.9% |
| Youth center | 11 | 8.7% |
| Reasons of not recommending EC to all women | | |
| Increases risky behaviors | 23 | 27.7% |
| Fear of misuse | 15 | 18.2% |
| Propagates HIV/AIDS | 20 | 24.1% |
| Hurt the fetus | 9 | 10.8% |
| Fear of S/E | 9 | 10.8% |
| Religious reason | 7 | 8.4% |

Discussion: The study was aimed at examining the level of knowledge, utilization and attitudes towards EC among undergraduate female students of Ambo University. From the total study participants, 203 (62.5%) had information about emergency contraception. This was similar to the finding in West India but lower than the one reported from north Ethiopia in which 83.5% of respondents had information about EC^{14,21}. But the percentage of respondents who had information about EC in this study was higher than studies conducted in south west Ethiopia and Nigeria^{1,18,19,22}. This difference could be due to the socio demographic difference of the respondents such as their respective college, year of study and marital status. It could be also the effect of time dependent factors such as media expansion and access to different reproductive health services as well as internet services as the country's economy is increasing from time to time in alarming rate.

Media (television/radio) and closest individuals like family and friends were identified to be the major pillar of information for the respondents about EC in the present study. These are also observed to be the major sources of information in studies done in India, and north and south Ethiopia^{14,19,21}. Moreover, schools were also important sources of information in this study. This highlights the importance of high media coverage, transparent discussion on EC in families and partners as well as school based reproductive health education in creating the awareness about EC for the adolescents and also the community. However, Abera and colleague, as well as Admasu and colleague classified Medias and school among the rare sources of information for EC^{1,22}. This could be due to the fact that Medias and school based RH services are not expanded unlike the present time at that time.

In the present work, the proportion of participants who correctly knew the recommended time for emergency contraception was higher than the other studies such as Nigerian and other parts of the country^{18,20}, but lower than that of South Africa¹⁷. Surprisingly about 10% of the respondents stated that ECP could be taken within one week of unsafe sex. This obviously increases the prevalence of unwanted pregnancy and hence abortion as well as its complications showing the unmet need for university students regarding sexual and reproductive health services.

In this study, the utilization of EC was 36.5% which was larger than studies done in Jimma University (6.8%), Marie stopes clinic in Jimma (5.4%), Addis Ababa University students (4.9%) and undergraduate students in Nigeria (11.5%)^{18,20,22}. Such facts could be related to the change in the awareness and perception of individuals with time as they are exposed to more education, information access and better understanding of the risk-benefits of the EC. But this figure was very much lower the findings reported from north Ethiopia and India. Such discrepancies could be explained in terms of the regional variations like difference in family planning coverage according to region^{14,21}.

The present work revealed that 62.1% of those who aware EC have a plan to use it if they will have unsafe sex. This finding was similar to the study done among university Students of South Africa. In contrast, respondents in this study had better attitude towards EC when compared to other studies in the country like Addis Ababa (53%), but lower than that south west Ethiopia (71.2%)^{17,19,20}.

Lastly, as descriptive studies do, this study is also limited by the self reported nature of the information collected which in turn might be subjected to biases.

Conclusion

In conclusion, the findings of this study are in accordance with other previous similar studies. Significant proportion of the students had awareness about EC while still higher proportion of them have poor knowledge regarding important parameters such the recommended time limit of the first dose after unsafe sex, types and indications for the method. The utilization and attitude toward this method of contraception had shown an improvement from previous time but not to the extent that they are expected to be. Therefore, to mitigate these problems, university based RH services and training programs which target university students should be implemented urgently and continuously. Moreover, RH as one subject should be incorporated to the curriculum of all departments in the universities of Ethiopia for the better understanding of the method by all students and hence the community at large.

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