Knowledge, attitude and practice of emergency contraceptive pills among female students of Hosanna College of Health Sciences, Hosanna, South Ethiopia

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*Corresponding author: E.Mail:wmessay@gmail.com ABSTRACT

Background: Emergency contraception (EC) has enormous potential to reduce the rate of unintended pregnancies; however, the use of EC has been opposed by some groups that believe it as an abortifacient and some groups argue EC may encourage riskier sexual behaviour and poorer use of regular contraception, especially among teens. The consequences of unplanned pregnancies in Ethiopia are multiple, such as high incidence of unwanted pregnancies and unsafe abortion particularly among adolescents and the major problems in the previous and present day is consequences of unprotected sex, such as unintended pregnancy and unsafe abortion which can be prevented by access to contraceptive services including emergency contraception. Thus this present study will provide a clue to assist policy makers in developing appropriate evidence based strategies to promote the use of emergency contraception methods.

Objective: To assess knowledge, attitude and practice of emergency contraceptive pills among female students in Hosanna College of Health Sciences, Hosanna town, Hadiya Zone, Southern Nation, Nationalities and Peoples Region, Ethiopia.

Methodology and Materials: A descriptive cross-sectional study was conducted from February 20 to March 6 among 263 female college students who were admitted in the academic year of 2012/2013. They were selected by using proportional allocation and the students answered a self-administered questionnaire up on consent.

Results and discussion: Out of the total female students (263), 62% are in the age interval of 20-24. The majority (47.9%) of respondents have got source of information about ECPs from Health education. Majority (35.74%) of the respondents used progesterone only pills, and the least (3.8%) used both combined oral contraceptives and Progesterone only Pills. Those who know and who didn't know about the use of time to take ECPs are 38% and 62% respectively. Those agreed about ECP's impact in future pregnancy is about 50.9%. However, 90% of the respondents said that they didn't use emergency contraceptive pills on regular basis to prevent unwanted pregnancy.

Keywords: Knowledge, Attitude, Practice, Emergency Contraceptives, Hossana, Ethiopia.

INTRODUCTION

Emergency contraception is a method used to avoid pregnancy after unprotected sexual intercourse unlike the regular methods of contraception that are taken before sexual contact. Consequences of unprotected sex, such as unintended pregnancy and unsafe abortion, can be prevented by access to contraceptive services including emergency contraception. Knowledge and practice on emergency contraception are particularly important because of high rates of unwanted and teenage pregnancy and soaring sexually transmitted infection (STI) and HIV/AIDS rates. Different studies, however, have shown that the knowledge and practice in relation to emergency contraception are limited among women. The practice of emergency contraceptives is almost inexistent in Ethiopia, as the method is not presented with other methods of contraceptives (Wegene Tamire, 2007).

It is estimated that 46 million abortions are performed each year, 20 million of which occur in countries where abortion is prohibited by law. Despite the social and cultural importance of child bearing in African society, unwanted pregnancies are a source of concerns within the family. This is more acute for adolescent girls who often fall pregnant out of wedlock. As unintended pregnancy still poses a major challenge to the reproductive health of young adults in developing countries, there is need to improve on their knowledge and utilization of contraceptives (Donije, 2011).

Given increasing adolescent sexual activity and decreasing age at first sex in developing countries, the use of contraceptives to prevent unwanted pregnancy and unsafe abortion is especially important. The potential effect of emergency contraceptives (EC) in this regard is obvious in sub-Saharan Africa. Its potential as the last resort to avoid unwanted pregnancy and therefore abortion makes it especially significant for those young couples that opt not to use a long-term regular contraceptive method and their sexual behavior is rather unplanned, erratic and

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irregular. An Ethiopian reproductive health need assessment report showed that there is little knowledge and information available about EC in the country. The major factor limiting the use of ECs was inadequate information about their effectiveness and availability or unfavorable opinions about their safety due to misinformation (Alemitu Worku, 2011).

The limited studies conducted on the issue of EC in the country were mostly focused on University students. Knowing the level of knowledge, attitude and practice (KAP) on EC is particularly important for female college students. Since most college students are from rural areas, where the chance of getting information on sexual and reproductive health is limited and must go outside campus and without parents' supervision, their vulnerability to unintended sex and unwanted pregnancy is high (Alemitu Worku, 2011).

Ethiopia is one of the countries with very poor reproductive health indicators. In 2005, only 15% of married women used contraception and in turn a 5.4 total fertility rate was recorded in the same year (CSA and MACRO, 2005).

World Health Organization (WHO) and collaborators report indicated that Ethiopia was only 4th on the list of countries with highest maternal mortality. Increasing prevalence of contraceptive use is believed to decrease a significant amount of maternal deaths, which is caused by unintended pregnancies. For various reasons women may face unintended pregnancy and at this time emergency contraceptive pills (ECPs) will be the first choice to terminate the pregnancy World Health Organization (WHO, 2004).

One of the major problems which Ethiopia was facing in the previous and present day is consequences of unprotected sex, such as unintended pregnancy and unsafe abortion which can be prevented by access to contraceptive services including emergency contraception. Thus this study aimed at assessing the knowledge, attitude and practice of emergency contraceptive pills (ECPs) among female students in College of Hosanna Health Sciences, Hosanna town, Hadiya Zone, South Ethiopia.

METHODS AND MATERIALS

An institution based descriptive cross-sectional study design was utilized among students in Hosanna College of Health Sciences, and statistically determined sample participants were drawn from total of 720 regular female students of all departments of 2012/2013 academic year of study. A sample size (n=263) was determined using single population proportion formula and proportionally allocated to departments and years of study (assuming p = 50%, precision = 0.05 and confidence level of 95%). The study was conducted by means of a questionnaire survey. The questionnaire included questions on socio-demographic variables, knowledge, attitude and practice towards ECPs.

Data Quality and Analysis: Data were collected using self-completed questioner designed to assess participants' knowledge, attitude and practice (KAP) on emergency contraceptive pills. The instrument was prepared after reviewing different literature and modified to suit to the local context. Before starting the actual study the questionnaire and the whole method was pre-tested on private non medical students for clarity and sensitivity of the questions, and correction was made based on the results obtained. One supervisor was appointed to check the completeness of all self administered questionnaire before leaving to the respondent. Questionnaire was checked for their completeness and consistency, and then data was cleaned, edited, and entered into Microsoft excel 2010 spreadsheet and imported to SPSS 19 for window version for descriptive analysis.

Ethical consideration: Written support letter was obtained from Pharmacy Department, Jimma University. All responsible individuals and officials were contacted at all levels including heads of the private medical college and Hosanna College of Health Sciences. Verbal consent was obtained from each respondent before distributing the questionnaire. Confidentiality of the result was kept. The rights of the individual not to participate were also respected.

RESULTS

Socio Demographic Characteristics: Out of the total respondents of 263 female students, the data concentration is high at 155 (62%) in the age interval of 20-24 that means more data have been obtained from aforementioned age interval. Likewise, marital status data have been collected where the single group is more (81.7%). With regard to the residence, 60.1% are from urban region. All religious sub groups were interviewed of which protestant were more (51.3%). Moreover of the whole respondents department, the data concentration is high (65%) in Midwifery. While most (48.5%) of the students were in their third year of undergraduate study (Table 1).

Table.1.Socio-demographic and academic characteristics of female students in Hosanna College of Health Sciences, Hosanna town, February 2013

Sciences, Hosanna town, February 2013					
Characteristics		Number (N)	Percent (%)		
Age	15-19	65	26		
	20-24	155	62		
	25-29	33	8		
	30-34	9	3.6		
	35-39	1	0.4		
	40-44	0	0		
	Total	263	100		
Marital status	Single	215	81.7		
	Married	26	9.9		
	Divorced	15	5.7		
	Widowed	7	02.7		
	Total	263	100		
Residence area	Urban	158	60.1		
	Rural	105	39.1		
	Total	250	100		
Religion	Orthodox	55	20.9		
	Muslim	46	17.5		
	Protestant	135	51.3		
	Catholic	27	10.2		
	Total	263	100		
Department	Nursing	47	17.9		
•	Midwifery	171	65		
	Laboratory	34	12.5		
	Environmental	11	4.2		
Year of study	Year I	76	28.89		
	Year II	54	20.5		
	Year III	127	48.2		
	> Year III	6	2.2		

Source of information:

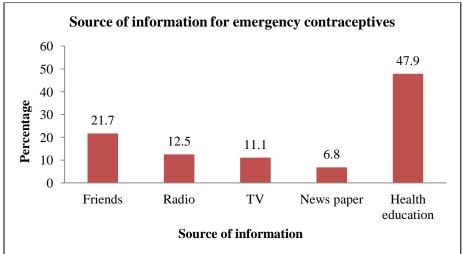


Figure 1: Source of information for emergency contraceptive pills among the female students who knew emergency contraceptive in Hosanna College of Health Sciences, Hosanna town, February, 2013

The majority of respondents have got source of information about ECPs from Health education i.e., 47.9% and only 6.8% got from newspaper (Figure 1).

Types of Emergency Contraceptives Pills used:

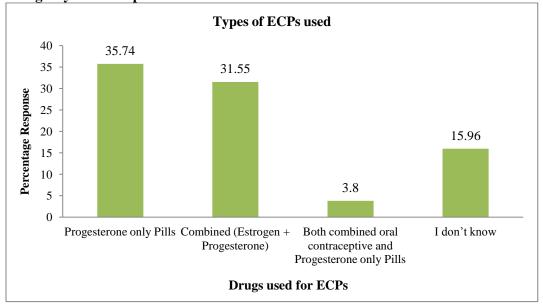


Figure 2: Types of emergency contraceptives pills used among female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

Out of the total number of female students' majority of the respondents 35.74% used progesterone only pills, and the least 3.8% used both combined oral contraceptives and Progesterone only Pills (Figure 2).

Characteristic of the use of emergency contraceptives: Among the total respondents of 263 female students majority of them (62%) don't know the time to take ECPs and among the respondents who know about the use of time to take ECPs are 38%(9%, 11%, 18%) 24hrs, 48hrs and 72hrs after sex respectively. Besides, those respondents who know about the ECP's dose are 12.92%, 27.75%, 7.22% with respect to single, double, and triple doses respectively and the rest 52% didn't know about ECP's dose. But, those who know about the gap (12hrs) in between taking the ECP's is high at 55.89% (Figures 3, 4, 5).

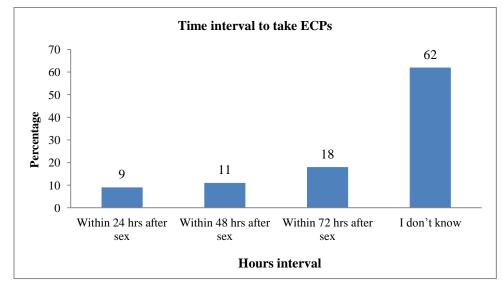


Figure 3: The time interval to take emergency contraceptive pills among female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

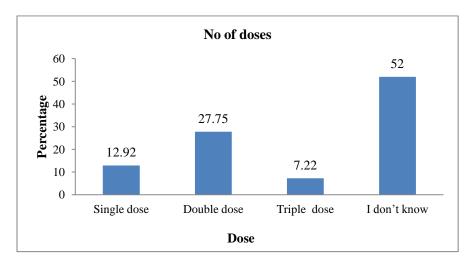


Figure 4: The number of doses of emergency contraceptive pills taken by female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

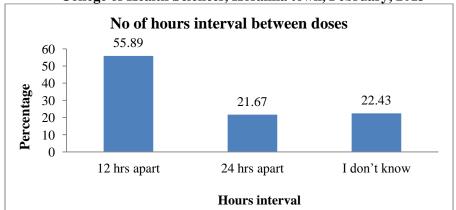


Figure 5: The time interval between doses of emergency contraceptive pills taken by female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

Knowledge about emergency contraceptive pills Knowledge about emergency contraception pill 66 70 57 55 60 52 50 313336 Response in % 40 30 21 17 20 Yes 10 ■ No Are ECPs **ECPs** ECPs are ECPs are **ECPs** Have you ■I don't know ever heard 100% terminate available by more Provide of ECPs? effective? pregnancy, prescription Effective protection if woman only when taken from STD already immediately pregnant **Drug used for ECPs**

Figure 6: Knowledge about emergency contraceptive pills among female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

Those who have heard about ECP's are about 45% where as those who haven't heard about it is about 55%. In addition regarding the effectiveness among the respondents 41% responded positively and 15% responded negatively; but, the remaining responded neither (they don't know). Moreover, the percentage of respondents who responded yes about strict drug intake is 13%, and those who responded negatively about it is 66%; but, those are in neither is about 21% (Figure 6).

Table 2: Attitude towards emergency contraceptive pills among female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

,	Percentage		
Opinions	Agree	Neutral	Disagree
If I have unintended sexual intercourse I would use ECPs	182 (69.3)	44 (16.7)	37 (14)
If a close friend or relatives have unintended sexual intercourse I would advise to use ECPs	172 (66.3)	67 (25.5)	24 (9.1)
Wide spread use of ECPs will increase the prevalence of HIV/AIDS and other STDs	39 (14.8)	65 (24.7)	159 (60.5)
Emergency contraceptive pills promote promiscuity	27 (10)	67 (25.4)	169 (64.6)
I don't want to use emergency contraceptive for fear of side effects	25 (9.5)	144 (54.7)	94 (35.7)
If readily available, it will promote irresponsible sexual behaviour	36 (13.7)	139 (52.8)	88 (33.5)
May cause more STD or HIV prevalence due to seldom usage of condoms	40 (15.2)	119 (45.2)	104 (39.5)
Emergency contraceptives should be easily accessible	52 (19.7)	127 (48.3)	84 (32)
Current price of ECPs in Market	41 (15.6)	154 (58.5)	68 (25.8)
Emergency contraceptives be cheaper	29 (11.1)	168 (63.8)	66 (25.1)
ECPs be available to victims of rape only	24 (9.1)	178 (67.7)	61 (23.2)
ECPs might affect pregnancy in the future	134 (50.9)	46 (17.6)	83 (31.5)
ECPs might be harmful to the body	94 (35.7)	22 (8.4)	147 (55.9)
ECPs discourages the use of condom with partner	74 (28.1)	57 (21.7)	132 (50.2)

From the above table, those who agreed regarding the easy accessibility of emergency contraceptives is 19.7% and those who disagree is about 32%; however, the percentage of those who are neutral is about 48.3%. Again regarding those who responded ECP's was cheaper is 11.1% and those who disagree about it is about 25.1%; but those who responded neutral is 63.8%. Likewise those agreed about ECP's impact in future pregnancy is about 50.9% and those who disagree about the side-effect is 31.5%; however, those who are neutral is 17.6%.

39 (14.8%) of the respondents said that wide spread use of ECPs will increase the prevalence of HIV/AIDS and other STDs because ECPs utilization will avoid the fear of un intended pregnancy so this will predisposes for making unprotected sexual intercourse with multiple sexual partners. 27(10%) of the respondents agreed that emergency contraceptive pills promote promiscuity because use of ECPs and condom will only prevent unintended pregnancy so there is no need to use both of them at the same time. 74(28.1%) of the respondents agreed that ECPs use discourages the use of condom with partner because use of ECPs and condom will only prevent un intended pregnancy. So there is no need to use both of them to prevent unintended pregnancy. 57(21.7%) of the respondents agreed that ECPs use encourages the use of condom with partner because use of ECPs and condom will avoid both the fear of un intended pregnancy and STDs.

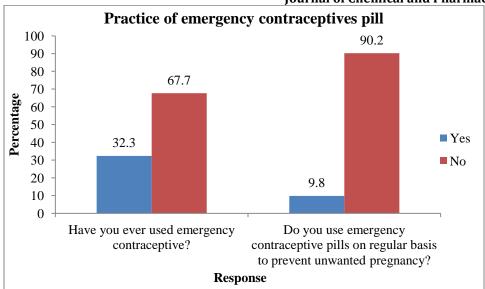


Figure 7: Practice of emergency contraceptive pills among female students of Hosanna College of Health Sciences, Hosanna town, February, 2013

85(32.3%) of the respondents have used emergency contraceptive because they make sexual intercourse during unsafe period. Out of 26 (9.8%) of the respondents, who have been using emergency contraceptive on a regular basis, 16 (61%) use once in a week, 6(23%) use once in two weeks, and 4 (16%) use once in a month to prevent unwanted pregnancy.

DISCUSSION

There has been ongoing confusion between EC pills and medical abortion drugs. In 2006 survey, only one in four reproductive age woman in California knew that EC pills are different from the medical abortion drug. Inaccurate depiction of EC in the media may contribute to limited knowledge and confusion about these contraceptives. Nearly 60 percent of all U.S. pregnancies and 81 percent (1.43 million/year) of pregnancies among adolescents are unintended and end in elective termination (Sarah S. Brown, 1995). In developing countries more than (55%) abortion are unsafe. Unsafe abortion is responsible for one in eight maternal deaths. In evaluating the KAP on EC among students in teachers' college in Tanzania timing of ECP taking response was 75.0% who responded right that is to be taken within 72 hours after sex and only a few (2.5%) said should take ECP five days after coitus (Hinju J, 2006).

A survey done on KAP of 2009 graduating female students of Jimma University main campus the respondents who had heard of emergency contraceptives, only 11 (6.8%) used ECs. Only oral contraceptive pills were used as an emergency contraception (Nasir Tajure, 2010).

Several studies in Ethiopia 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. Consequences of unprotected sex, such as unintended pregnancy and unsafe abortion, can be prevented by access to contraceptive services including emergency contraception. Among Ethiopian university students assessment on KAP was done in 2007 on EC about 53% (95% CI 49.1-56.1%) of the students have positive attitude towards emergency contraceptives (Wegene Tamire, 2007).

Although emergency, contraception in not recommended as a regular family planning method, it is a useful method after unprotected sexual intercourse to reduce the chance of unwanted pregnancies. Emergency contraception is most useful when there is a failure of barrier methods such as slippage and breakage of condoms or when sexual intercourse was unpredicted (Morhason Bello IO *et al*, 2008).

The result from this study, revealed that nearly 45% of the respondents had ever heard of the methods and this finding is less than the findings of other college students in developing countries like Jamaica (84%) (Sawyer, R.G, 2003) and Hong Kong was (78%) (Lee SW, 1999). It is comparable to findings that were reported in South Africa (40%) (Landon Myer, 2007) and Uganda (43.1%) (Josaphat B, 2006).

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The most common source of information was health education (47.9) and friends (21.7). This is similar to the data reported about emergency contraceptive knowledge among Uganda university students in which the main source was health education and in the reported study, 21.7% of respondents who know about emergency contraceptive had got the information from friends while 11% got from Television and 12.5% by Radio (Josaphat B, 2006). But different from a study conducted in Addis Ababa University where 43.5% responded that the main source of information was media (Wegene Tamire, 2007).

Even though 31% respondents had basic awareness of emergency contraceptives the students lacked detailed knowledge about the regimen that is the majority of the respondents who know what emergency contraception (69%). 62% didn't know that the drugs have to be administered with in 72 hour of unprotected intercourse. Only 38% of them have identified the correct timing of administration of pills after unprotected sexual intercourse. Results of a similar survey performed in Scotland showed that although teenagers were well informed about the existence of the emergency contraception and 22.4% respondents did not know time limit to use ECPs (Graham A, 1996).

It is lower (42%) than study conducted in South Africa (Landon Myer, 2007) and in a study done on Female University Students in KwaZulu-Natal, South Africa 29.5% said it could be used up to 72 hours after unprotected sexual intercourse (Hoque ME, 2012), it is better than studies done in female college students of Arba minch (65.3%) had no knowledge of time to use (Alemitu Worku, 2011), 26.2% in Addis Ababa University (Wegene Tamire, 2007), and 53.4% had never heard of EC in Haramaya University (Desta B, 2011) and the reason for the lack of detailed knowledge on this subject may be linked to the source of information friends that may not have a good grasp of the subject.

From the respondents who know about ECPs, 63% of the respondents get emergency contraceptive from pharmacy and the remaining 37% respondents get emergency contraceptive from drug store, friends & medical personnel. 69.3% of students who know about emergency contraceptives believed that they would use emergency contraceptive after unprotected sex, and 66.3% of them agree to advise friend of relatives to take emergency contraceptive after unprotected sexual intercourse. It is comparable to reports in Honduras in which more than 70% respondent indicated that they use the method (García SG, 2006). There were also other opinion from respondents that restrict permission and use of emergency contraceptive like fear of side effect, wide spread use of ECPs will increase a prevalence of HIV/AIDS other STDs and Emergency contraceptives promote promiscuity.

In this study those who had heard of emergency contraceptives was (45%) of which only 26(9.8%) had practiced it to prevent unwanted pregnancy. Whereas a study conducted in Addis Ababa University is 4.9% (Wegene Tamire, 2007) and 10% practice in Hong Kong (Lee SW, 1999). This awareness of practice in the study area may be due to correct information.

CONCLUSION AND RECOMMENDATION

The present study shows that the awareness of emergency contraceptive pills among female students of Hosanna College of Health Sciences' is low; and even among those who are aware about the practice of emergency contraceptive is relatively high. This indicates that there is aware of correct information about the method. As the health students would be expected to have better knowledge and to give information about the ECPs for others who lack the information. But the findings shows that majority of the students lack sufficient knowledge about the emergency contraceptive pills and also the finding point out that the health education and promotion carried out concerning emergency contraception is not sufficiently initiate its utilization.

There is a need to educate female students about emergency contraception with emphasis on available methods and correct timing of use. There should be promotion of dedicated emergency contraceptives to enhance its practice. Health education program in local FM Radio and colleges should be setup to avail accurate information about emergency contraception. Introduction of special package to emergency contraception and making them easily accessible in hospitals, pharmacies, and clinics while considering students affordability. Further research should be done about emergency contraception by widening its study area and population.

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