



**KNOWLEDGE, ATTITUDE, AND PRACTICE OF EMERGENCY  
CONTRACEPTIVE AMONG FEMALE YOUNG'S/STUDENTS:  
ARTICLE REVIEW**

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**ABSTRACT**

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**Background:** Despite surprising technological advancement in modern contraception methods unwanted pregnancy followed by unsafe abortion is one of the major worldwide public health problems, which has many negative consequences on the health and well-being of all reproductive age group. We aimed to identify and describe knowledge, attitude and practice of emergency contraceptives plays a major role in

the reduction of unwanted pregnancy. **Methods:** In this review, we studied peer-reviewed journal articles on the field of Knowledge, Attitude, and Practice of Emergency contraceptive among female Young's/students, the only female students, which were published between 2006 and 2010. In this regard, we searched databases of PubMed, Elsevier, BMJ, PMC, and MEDLINE. Furthermore, we were also searching by hand and from other internet sources such as Google scholar and Google. **Result:** There were 68 potentially relevant studies on PubMed data base using key word for searching emergency contraceptive and Ethiopia. Of this 20 studies were free to be accessed. From the study conducted at different university of Ethiopia there is significant number of unintended pregnancy. Even though there is positive attitude towards emergency contraceptive but the utilization less on the study conducted at one university in Ethiopia and also for instance a study conducted at Adama university from 660 respondents 63 (9.4%) had history of pregnancy and 49(7.4%)had history of abortion.

**Conclusion:** Even though all the study showed that there is emergency contraceptive awareness in College/University students the rate of utilization is not significant. Therefore it is highly recommended that interventions intended towards on the attitude and practice of the student are very mandatory so as to combat maternal mortality through contraceptive utility and by continues delivery of information for the target groups(college/university students). Knowledge based on emergency contraceptive on female Young's/students is a well-accepted issue and has important positive outcomes on several areas of health discipline.

**KEYWORDS:** Knowledge, Attitude, Practice, Emergency contraceptives, Female young's, Students.

## INTRODUCTION

Emergency contraceptive(EC) is a type of modern contraception which is indicated after unprotected sexual intercourse, following sexual abuse, misuse of regular contraception or non use of contraception(Wegene and Fikre,2007). EC plays a vital role in preventing unintended pregnancy, which in turn helps to reduce unintended child birth and unsafe abortion, which are major problems of maternal health (Wegene and Fikre, 2007). It is found to be effective if used as soon as possible after unprotected sexual intercourse, especially within 72 hours of unprotected sexual intercourse (Zelege et al, 2009).There are two types of ECs namely, emergency contraceptive pills and intrauterine devices (IUDs). The pills include combined oral contraceptive pills (COCs), and a progestin only pills (POPs); IUDs can be effective if it is inserted within 5 days of unprotected sexual intercourse (Mengistu, 2007). EC is said to be safe with minor side effects like nausea and vomiting in case of pills and infection for IUDs if not used properly (Mengistu, 2007). Effectiveness of EC said to be 75% in case of COCs and 85% in case of POPs (Kongnyuy et al, 2007). Regarding the mechanism of action, EC works by preventing fertilization, implantation and tubal transportation of sperm and ovum(Kongnyuy et al, 2007). Each year there are about 250 Million pregnancies globally and one third of these are unintended and 20% of these undergo induced abortion(Manena-Netshikweta, 2007). In Low income countries, more that one third of the 182 million pregnancies is unintended; the fate of 19% will be induced abortion and 11% of this is unsafe (Manena-Netshikweta, 2007). In low income countries, the women who do not use any contraceptive contribute to two third of unintended pregnancies, where more than 100 million married women have unmet need for contraception (Manena-Netshikweta, 2007). Unsafe abortion has much ill effects in women's health, each year about 68,000 women die

because of unsafe abortion, and millions of women end up with many complications of unsafe abortion, which could include severe infection and bleeding; this could have been greatly reduced by using EC (Eugene *et al.*, 2007). Each year about 500,000 women die due to cases related with child birth, and majority are in sub Saharan Africa where there is also high fertility rate that is more than five (Sorhaindo *et al.*, 2002). Globally, it's estimated that 11% births are given by adolescent girls of age 15-19 annually, and 95% of these births are in low income countries, Ethiopia is one of the countries with high adolescent birth rate (Micheal *et al.*, 2003a). Most adolescent pregnancies seem to be intended; just because they happen within marriage but in reality most of them are unintended rather the marriage itself is arranged by the girls' family due to some cultural influences (Micheal *et al.*, 2003a). Adolescent pregnancy affect the health of mother and child, it has a devastating impact in social and psychological life of the girls (Micheal *et al.*, 2003).

Ethiopia is one of the countries with high maternal mortality rate; the estimated rate in 2005 was 673 per 100,000 live births (Micheal, 2003b). In one of the surveys conducted in Ethiopia, among 1075 women who presented with abortion, about 58% were between age group of 20-29; and non use of contraceptive contributed to 78% of these pregnancies and rape accounted for 3% of the abortions (Aziken *et al.*, 2003). In a study conducted in one of the high schools of Ethiopia, the prevalence of attempted rape was 8.8% and the prevalence of performed rape was 11.5% (Akani, 2008). Despite the fact that different modern contraceptives exist worldwide, the problem of unintended pregnancy still exists, which could be due to gap in awareness, negative 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 vital to have EC as a backup method. In one of the studies conducted among 417 women of post abortal care clients in Ethiopia, 59 (14.1%) had ever heard of EC, and only 15 (8.6%) had ever used EC (Micheal *et al.*, 2006). In another study among 833 college students in one of the towns of Ethiopia, the magnitude of sexual violence was 47.9%, and unwanted pregnancy was found to be 16.9%; about 228 (27.4%) had knowledge about EC, 20 (2.4%) had ever used it and about 548 (65.8%) had favorable attitude towards use of EC (Josaphat *et al.*, 2006). Considering the importance of EC in preventing unintended pregnancy, this review aimed to assess the knowledge, attitude and practice of EC and to further elucidate the relationship between these factors and socioeconomic and demographic characteristics among female undergraduate students of at college and universities. Therefore, the aims of this review was to assess the association of having good

awareness; attitude and practice on emergency contraceptive among young's or college/university students with the improvement of quality of life in the reproductive age group and its magnitude of unmet need for emergency contraceptive among young's or college/university students.

## **METHODS**

We conducted this review of the article in the field of Knowledge, Attitude, and Practice of Emergency contraceptive among female Young's/students. In this regard, we investigated the PubMed, Elsevier, BMJ, PMC, MEDLINE, and Psych info search engines. Additional search were also performed from other internet sources such as Google scholar and Google. This method was used to determine the accuracy of the results through comparing them in the related articles from various sources. This review is based on peer-reviewed journal articles on "Knowledge", "Attitude", and "practice" on emergency contraceptive' were published between 2006 and 2010. This time span was chosen because up-to-date information is important to justify and address the objective of the review articles.

After assessing all titles and contents of the articles, the relevance of the articles to address the objectives of this study were considered and evaluated. The terms used for searching related articles were on "Knowledge", "Attitude", and "practice" 'Emergency contraceptive' "female", and 'Young's/students and "Ethiopia" were used together to search the articles from different websites. In the first step, a total of 68 articles were found. The titles, summary or abstract, and the whole body of each article were then checked for their relevance and suitability to be included in the analyses. Secondly, 26 articles were recruited .Finally, after reassessed these articles, the only five studies were found to be eligible because they are directly related with emergency contraceptive and students' knowledge, attitude and practice on benefit of Emergency contraceptives.

### **Inclusion and exclusion criteria**

The authors read the titles and decided to include articles in the review regarding the following criteria: The study included one or more instruments to gather information on assessment of knowledge, attitude and practice of emergency contraceptive among young's college/university students. Inclusion of only literatures done on young's or college/university students. Moreover, Articles published between 2006 and 2010, and those published in English were eligible for the analysis. Studies that did not meet these criteria was excluded. This review is focused on the comparison of knowledge, attitude and practice

of emergency contraceptive among young's college/university students, Furthermore, the review identified the feature of female students knowledge, attitude and practices on Emergency contraceptives. However, all abstracts were excluded from this review article. And the study conducted on the contraceptive prevalence and studies conducted out of college or university on emergency contraceptive as well other contraceptive and drug dispensers working in retail outlets were excluded from this review.

### **Data extraction**

From the studies that were included in the systematic review data regarding date of publication, the setting of the study ,the population included in the study, the data relevance and the overall assessment of knowledge, attitude and practice on emergency contraceptive among young's or university female students. After two reviewers recruited articles, immediately all recruited articles quality also was assessed by third reviewer. In addition, the discrepancies were resolved all reviewers with discussion.

### **RESULT**

There were 68 potentially relevant studies on pubmed data base using key words for searching emergency contraceptive and Ethiopia. Of those 68 studies 20 were free to be accessed from PubMed data base and 6 from Google scholar were included in this literature review. The studies were published until 2010.The finding of those studies revealed that except in one study that conducted at Adiss Abeba University for undergraduates' student has higher awareness (Wegene and Fikre, 2007). the other study shows there is less awareness(less than 50%) of the respondent(89(10%), 660(46.8%), 153(13.1%),389(41.9%) studies done at Jima university at different times on emergency contraceptives by graduator class (Zelege et al,2009). their awareness depends on the class year (year three were better understanding than year one and two)( Wegene and Fikre,2007; Zelege et al,2009).The source of information for their awareness shows us 368(69.3%) and 153(11.8%) from Jima university and Adiss Ababa university were media and friends respectively(Wegene and Fikre,2007; Zelege et al,2009). among those aware of emergency contraceptive that was conducted at Hawasa and Adiss Abeba university majority (99%) of them had good (positive)attitude towards emergency contraceptives and they believe 99% are effective(Wegene and Fikre, 2007; Zelege et al, 2009) .

The source of the information also differ from one research to other researches in some study they said from medias 368(75.5%) at Adiss Abeba university and the others from health institution and friends from 389(36.5%) at Jima university. but in all studies shows us all those students interviewed about the emergency contraceptive had positive attitude towards emergency contraceptive (Wegene and Fikre, 2007; Zeleke et al, 2009). The reason to restrain not to use this emergency contraceptive after they face unsafe sex was due to fear of side effect of the drug (Zeleke et al, 2009).

Among the respondents who had ever heard of EC reported that 99% said effective and safe to use and the time to use during post rape and after condom became tearing (Wegene and Fikre,2007; Zeleke et al,2009). Among those who had unprotected sexual intercourse majority had ever used EC, which was those who were sexually active and ever heard of EC (Wegene and Fikre, 2007; Zeleke et al, 2009). Among those who had ever used less number reported that it was recommended by health professional and the rest by a friend. Generally awareness and practice about emergency contraceptives was significantly associated with faculty of respondents and origin of residence (a study conducted at Adiss Abeba university had better awareness on emergency contraceptive than other university in Ethiopia and health faculty are more likely to have information and more positive attitude towards emergency contraceptives than others (Wegene and Fikre, 2007; Zeleke et al, 2009).

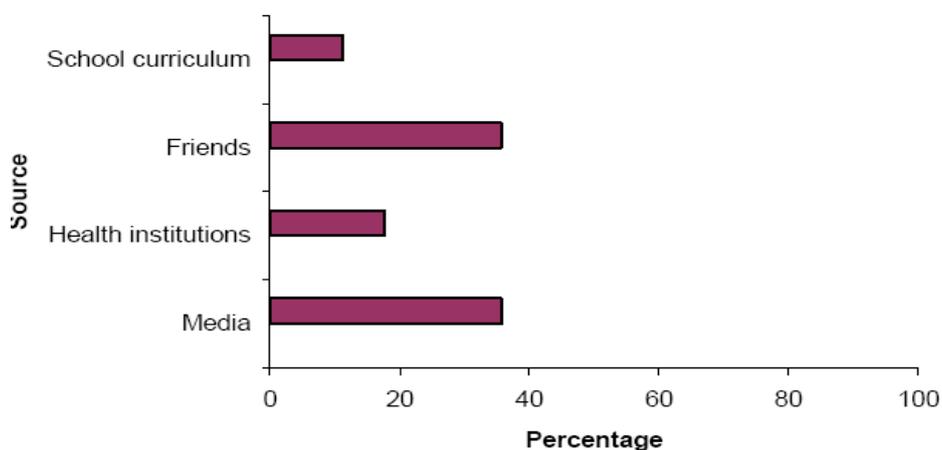


Figure 1: Main sources of information on emergency contraceptive among respondents who have heard about it.

Therefore from the above figures what we understood were the source of information for the awareness on emergency contraceptive were media, friends, health institution and at in school training respectively (Wegene and Fikre, 2007; Zeleke et al, 2009). This figure is better than

studies conducted in Addis Ababa University (53%), Bahir Dar University (56.7%), and Hawassa post secondary female students (65.6%) (Wegene and Fikre, 2007; Zeleke et al, 2009).

As we noted from the result of the actual study, participants who had ever heard of EC were less awareness on emergency contraceptive 660(46.8%), 89(10%) at Adama university and Jima university respectively but high at Adiss Abeba 368(84.2%). The level of awareness depends on their level of education and residence, which can have an influence on the awareness level of EC. It is believed that educated people are much more dedicated to their health than non-educated people. Awareness of EC is relatively higher among the participants of this study that conducted in Addis Ababa (Wegene and Fikre, 2007; Zeleke et al, 2009; Mengistu, 2007). In those study that conduct at different university in Ethiopia, Media was found to be the main source of information for EC and follows by friends (Wegene and Fikre, 2007; Zeleke et al, 2009; Mengistu, 2007).

In a similar study conducted in Nigeria among undergraduate college students, the main source of information was through friends/peers. In another study conducted in 2005 among 379 female students of Makerere University of Uganda, only 45.1% had ever heard of EC; their main source of information were also via friends 34% followed by Media 24.8% (Kongnyuy et al,2007; Manena-Netshkweta,2007; Eugene et al,2007).Beside this, the source of information differs from one country to another countries. In those studies, sexually active participants, aged married women had a better knowledge and attitude than those younger and sexually inactive participants, who are believed to be reluctant about EC. As I review from one research that was conducted female students of Haramaya University, the finding revealed that their level of knowledge of EC is generally low (25.7%) but it is better to Jimma University (22.8%)and it is less than those conducted in Bahir Dar University (34.8%) and Addis Ababa university (43.5%). It is even much lower compared to the studies conducted among universities in other African countries such as Kingston/Jamaica (84%), Nigeria (58%),Cameroon (63%) and Niger Delta of Nigeria (50.7%), all documented a rate greater than 50% (Wegene and Fikre, 2007; Sorhaindo et al, 2007; Micheal et al, 2003a; Micheal et al, 2003b; Azikani, 2003; Akani, 2008; Micheal et al, 2006; Josaphat etal, 2006; Bayamugisha et al, 2006; Sorhaindo et al, 2002).

The summarized figure for attitude towards EC indicated that 76.5% of the respondents who have ever heard of EC had favorable attitude toward EC. According to the study conducted at different university of Ethiopia and as well the university of Africa it shows having history of pregnancy ,usage of regular contraceptives and sexually active girls had better attitude on emergency contraceptives than those who had no experience of regular contraceptive and no history of pregnancy before(Wegene and Fikre,2007, Sorhaindo etal,2002).Utilization of emergency contraceptive also shows from the study, it is higher on those girls faced unwanted pregnancy as well on those age 20 years and above.

### **LIMITATION OF THE REVIEW**

This systematic review have several limitations .it was not possible to make a synthesis of the data using the principles of a literature review due to the fact that there was considerable heterogeneity among the reviewed studies. There were only five studies which directly measure the association between emergency contraceptive and with students at university. Among those free articles only small number of articles had full article and data relevant for review. It was difficult to extract data relevant to the review from the studies because the studies had been used different methods to explain the result and discussion about their study on emergency contraceptives. Some studies were limited to specific group of population even among which might create a problem in including them in the review as they didn't represent the general population.

### **CONCLUSION AND RECOMMENDATION**

Optimal effort should be done on awareness on emergency contraceptive among training institution because there is high mortality rate in our country related to abortion. As the studies clearly indicated there is superficial knowledge and low utilization of emergency contraception. To improve this situation the following recommendations should be made. Strengthening advocacy and IEC (information education and communication) to increase awareness and knowledge of students about emergency contraceptive methods. Motivating and training for the students who are assigned in the university about emergency contraceptives and at large family planning services. The Dean/President of the university should give high emphasis on IEC on family planning for the new comer students. Not only female students but also the male students should be aware on family planning services. This can reduce unwanted pregnancies that were related to partner pressure and rape.

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## AUTHORS' CONTRIBUTION

Development of the original idea and protocol, data abstraction and analyses, writing the Manuscript: Molla Teferi and Professor Yemane Berhane and Development of the protocol, overall guide data abstraction, preparing the manuscript: Molla Teferi and Professor Yemane Berhane and Addis Adera.

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## REFERENCE

1. Akani, CI., Enyindah, CE., Babatunde, S. Emergency Contraception: Knowledge and Perception of Female undergraduates in the Niger Delta of Nigeria. In Ghana Med J. Volume 42. Department of obstetrics and gynecology. Choba Port Harcourt, Nigeria, 2008; 2: 68-70.
2. Aziken, ME., Okonta, PI., Aude, AB. Knowledge and perception of emergency contraception among female Nigerian undergraduates; International family planning perspectives., 2003; 29(2): 1-10.
3. Bayamugisha, JK, Mirembe, FM., Faxelid, E., Danielsson, KG. Emergency Contraception and Fertility awareness among University students in Kampala, Uganda. Afr Health Sci., 2006; 6(4): 194-200.
4. Eugene, J., Pius, N., Nelson, F., et al. A survey of knowledge, attitudes and practice of emergency contraception among university students in Cameroon. BMC Emergency Medicine, 7:7:1-7. PHD thesis. Reterived from <http://www.uir.unisa.ac.za/bitstream/10500/1977/1/>
5. Josaphat, B, Florence, M., Elisabeth, F., Kristin, G. Emergency contraception and fertility awareness among University students in Kampala, Uganda. East African Medical Journal, 2006; 6(4): 194-200.

6. Kongnyuy, EJ, Ngassa, P., Fomulu, N., Wiysonge, CS., Kouam, L., Doh, AS(2007). A survey of knowledge, attitudes and practice of emergency contraception among university students in Cameroon. *BMC Emerg Med.*, 2007; 17; 7:7.
7. Aziken, ME., Okonta, PI, Ande, ABA. Knowledge and Perception of Emergency Contraception among Female Nigerian Undergraduates. *International Family Planning Perspectives*, 2003; 29(2): 84-87.
8. Michael, A., Patrick, O., Adedapo, A. Knowledge and Perception of Emergency Contraception among Female Nigerian Undergraduates. *Int Fam Plan Perspect.*, 2003; 29: 85–86.
9. Michael, E., Azikon, P., Okonta, B. Knowledge and perception of emergency contraception among female Nigerian under graduates. *International family Practice Perspectives*, 2006; 35(4): 201-8.
10. Mengistu S (2007). Assessment of level of awareness and utilization of emergency contraception among college female students in Oromia Regional State, Arsi Zone, Assella. Addis Ababa University Libraries Electronic Thesis and Dissertations: AAU-ETD, Faculty of medicine: Thesis-public health 2007 [<http://etd.aau.edu.et/dspace/handle/123456789/723>].
11. Manena-Netshikweta, M(2007). Knowledge, perception and attitude regarding contraceptives among secondary school learners in the Limpopo province, November 2007, South Africa.
12. Sorhaindo, A., Backer, D., Fletcher, H. Emergency contraception among university students in Kingston Jamaica. *Survey on Knowledge, Attitude and practice of emergency contraception. BMJ*, 2002; 64(4): 261-8.
13. Sorhaindo, A., Becker, D., Flecher, H., Garcaia, SG. Emergency contraception among university students in Kingston, Jamaica: A survey of knowledge, attitude and practice. *Contraception*, 2002; 66: 261-268.
14. Wegene, T, Fikre, E. Knowledge, attitude and practice on Emergency Contraceptives among female students at higher education are in Addis Ababa. *Ethiopian Journal Health Development*, 2007; 21(2): 111-116.
15. Zeleke, G, Zebenay, Z., Weldegerima, B. Knowledge Attitude and Practice of Emergency Contraceptives in Bahir Dar University Female Students. *Ethiopian Journal of Reproductive Health*, 2009; 3: 59-64.