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Awareness about emergency contraception among medical students in a Tamil Nadu private medical college: a cross sectional study

Kamal Kishore Verma¹, Rajeev K. H.²*

Department of Community Medicine, ¹Karpagam Faculty of Medical Sciences and Research, Coimbatore, Tamil Nadu, ²JJM Medical College, Davanagere, Karnataka, India

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*Correspondence: Dr. Rajeev K. H.,

E-mail: palegar.aashish2017@gmail.com

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ABSTRACT

Background: The methods of contraception that can be used to prevent pregnancy in the first five days after sexual intercourse are termed as emergency contraception (EC). Unwanted pregnancy among adolescents and youth poses a major challenge to the reproductive health in developing countries because of illegal and unsafe abortions and leading to maternal death. Since medical students are future health care providers and their correct awareness about EC will help in giving health education to the community. The objective of the study was to assess the awareness about emergency contraception among first year medical students in a private medical college of Tamil Nadu.

Methods: A cross sectional study was conducted among first year medical students of a private medical college. A total of 122 students were interviewed using pretested, semi-structured questionnaire. Descriptive statistics were used to analyse the data.

Results: Among the study population, 56.6% and 43.4% were males and females respectively. All students heard about EC and 73% were correctly aware about the correct timing of administration of EC. 72% of them felt that they can get EC directly from any pharmacy store without any prescription, 89% of them feel that EC is not an effective routine method of contraception and only 10% said that it will result in more women suffering from STI/HIV.

Conclusions: Our study showed that, students were having good knowledge about emergency contraception. Since they are future health care providers giving adequate training to them in acquiring good knowledge will help in dispensing the reproductive health education to the community especially for the adolescents and youth.

Keywords: Emergency contraception, Awareness, Medical students, Tamil Nadu

INTRODUCTION

Emergency contraception (EC) "post-coital contraception" or "morning after pills" refers to the methods of contraception that can be used to prevent pregnancy in the first five days after sexual intercourse. They are intended to use following unprotected intercourse, rape or coerced unprotected sex, contraceptive failure or misuse (such as forgotten pills, or breakage or slippage of condoms). There are two methods of emergency contraception (pills and intrauterine device) but because of easy availability and less skill required to use morning after pills, they have become most often sought method for emergency contraception.1

In developing countries, among young adults the unwanted pregnancy creates a major challenge in reproductive health in because of illegal and unsafe abortions and deliveries thereby increases the prevalence of maternal mortality in return.² Now a days, because of early onset of menarche and decreasing age of starting of sexual activity, young adults are at risk to explore early unplanned and unprotected sexual intercourse leading to unwanted pregnancy and, subsequently, abortions.^{2–4} Since, emergency contraceptives are the only easily available contraceptives that can be used after unprotected sexual intercourse, offering a second chance to prevent unwanted pregnancy.³

Emergency contraceptive pills acts by preventing ovulation, fertilization and/or implantation, thus it prevents pregnancy from occurring. The commonest reasons why women need emergency contraceptives are did not use a contraceptive method during intercourse 45% - 67%, failure of a barrier method in 25% - 48% including failed coitus interrupts, vomiting of contraceptive pills and rape in 7% - 14% of cases. 5

It has been observed that most of the adolescent's attitude towards premarital sex are becoming liberal and unintended pregnancies rates are becoming high along with their awareness of emergency contraceptive pills remains poor.^{5,6} Most adolescents begin their sexual activity without adequate knowledge about sexuality or contraception or protection against STIs/HIV.^{3,5,6}

Since medical students are future health care providers and their correct awareness about emergency contraception will help them in giving health education to the community at large, so we conducted this study with an objective to assess the awareness about emergency contraception among first year medical students in a private medical college of coastal Karnataka city.

METHODS

Study design

It was a cross sectional study.

Study setting

This study was conducted in a private medical college in a coastal city of Karnataka.

Study population

The medical students admitted to MBBS course during 2016 (150 students) were invited to participate in this study on awareness of emergency contraception conducted by the Department of Community Medicine.

Inclusion criteria

Students who were willing to participate and present during the day of survey.

Study duration

One month (October 2016).

Data collection

The study was conducted after taking ethical clearance from the Institutional Ethics Committee. Data were collected after explaining the purpose of the study to the students and taking informed written consent from those who were willing to participate in the study. The data were collected by using pre-tested semi-structured self-administered questionnaire.

Data analysis

Data were entered in Microsoft Excel, descriptive statistics were analysed using EpiInfo software.

RESULTS

Among 150 students, 122 students participated in the study and mean age of the participants was 18.3±0.48 years. Among the study subjects, 56.6% (69) and 43.4% (53) were males and females respectively.

Every participant has said that they have heard about the emergency contraception and 82% of the participants felt that the emergency contraceptives are a safe and effective method to prevent pregnancy after unprotected sexual intercourse.

Table 1: Awareness about emergency contraception among the first year medical students.

Awareness about emergency contraception	Frequency (n=122)	Percentage (%)	
Recommended time to take EC after unprotected sex			
Less than 72 hours	89	72.95	
Within one week	12	9.84	
After missed period	11	9.01	
Do not know	10	8.2	
Drug composition of ECPs			
Same as OCPs	9	7.38	
Same as OCPs but in higher dose	81	66.39	
Different drug compared to OCPs	26	21.31	
Do not know	6	4.92	

ECPs- Emergency contraceptive pills; OCP- Oral contraceptive pills.

About 72.95% (89) were correctly aware about the correct timing of administration of EC pill (within 72 hours of after unprotected sex). Around 66.39% (81) were respondents said that the drug composition of the EC pill is similar to normal contraceptive pills but at higher dose. About one fifth of the participants felt that EC's are highly effective and 69% of them felt that EC's are effective up to 75% in preventing pregnancy from unprotected sex (Table 1).

About 72.13% (88) of the students felt that they can get pills directly from any pharmacy store without prescription, 65.57% (80) and 73.77% (90) of them told that doctor and pharmacists as the provider of EC respectively (Table 2). About 88.52% (108) of the students feel that EC is not an effective routine method of contraception to prevent pregnancy.

Table 2: Perceptions about place of availability, provider and concerns on emergency contraception among the study population.

Perceptions on ECP	Frequency (n=122)	Percentage (%)
Place of availability ECPs*		
Public hospitals	55	45.08
Private hospitals	35	28.68
Institutional health centres	42	34.42
Pharmacies without prescription	88	72.13
Provider of ECPs*		
Doctor	80	65.57
Pharmacists	90	73.77
Nurses	32	26.23
Concerns regarding usage of ECPs*		
Side effects	42	34.42
Some people may use emergency contraceptive pills regularly in place of oral pills	68	55.73
Men may exert pressure on women to use it regularly instead of other contraception	57	46.72
Will result in more women suffering from STI & HIV	12	9.83

^{*}Multiple options were allowed.

About 55.73% (68) had the concern that "some people may use emergency contraceptive pills regularly in place of oral pills", 46.72% (57) had concern that "male partner may put pressure on women to use it regularly instead of other contraception and only 9.83% had concern that it may result in more women suffering from STI/HIV (Table 2).

The most common source of information about EC was from television (82.5%), followed by friends (11.5%) and health professionals (6%).

DISCUSSION

In this study, all the participants have heard about EC and it is similar to studies done by Reddy et al, Iliyas in India and Vahratian et al in USA.^{3,4,7}

Around 82% of the participants felt that the emergency contraceptives are a safe and effective method to prevent pregnancy after unprotected sexual intercourse.

About two third of the respondents said that the drug composition of the EC is similar to normal contraceptive pills but in higher dose which was similar to studies done in India but was very good compared to study conducted in Ethiopia.^{3,8} About 72.95% were correctly aware about the correct timing of administration of EC i.e. within 72 hours of after unprotected sex which was better than the study done by Reddy et al and similar to study done by Gupta et al and Iliyas in India. 3,4,6 Around three fourth of the students felt that they can get EC directly from any pharmacy store without prescription which was not a good attitude and it was less than study done among nursing students in India by Rahaman et al but more than the studies of Reddy et al and Iliyas.²⁻⁴ Almost three fourth of them told that EC will be provided by pharmacist which was similar compared to study of Rahaman et al but more than the study of Iliyas.^{2,4}

Around 89% of the students feel that EC is not an effective routine method of contraception and which was a good awareness about EC. Around half them felt that ECs can be misused instead of regular contraceptives which was similar Iliyas study and only one tenth of them felt that EC use may increase the chance of STI/HIV infection among women which was less compared to Iliyas study. In our study, students told that the most common source of information about EC was from Television which was similar to Iliyas study. However, studies done by Reddy et al and Parey et al found that common source of information about EC were from health professionals and friends respectively. 3.9

Limitations of the study was only one batch of students were included for the study. So, in our study the awareness about EC among first year medical students was good.

CONCLUSION

Our study showed that, medical students were having good knowledge about emergency contraception. The medical students are the future health care providers, so having good knowledge regarding EC will be helpful for them delivering good health care services to the community. So, by providing good practical oriented awareness to them will help in acquiring good knowledge which will help them in future in dispensing the reproductive health education to the community especially for the adolescents and youth.

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Institutional Ethics Committee

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