Original Research Article

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A cross sectional study on awareness about emergency contraception among medical students in Kannur, Kerala, India

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ABSTRACT

Background: Emergency contraception (EC) is the methods of contraception that can be used to prevent pregnancy in the first five days after sexual intercourse. Unwanted pregnancy among young adults poses a major challenge to the reproductive health in developing countries because of unsafe abortions and deaths due to the same. Since medical students are future health care providers and their awareness about EC will help in giving health education to the community. Objectives of the study were to assess the knowledge of emergency contraception among second and third year medical students in a private medical college, Kannur, Kerala, India.

Methods: A cross sectional study was conducted on second and third year medical students of a private medical college, Kerala, India. A total of 200 students were interviewed using pre-validated, semi structured questionnaire. Descriptive statistics were used to analyse the data.

Results: Among the study population, 58% and 42% were females and males respectively. All students were heard about EC and 78.5% were correctly aware about the correct timing of administration of EC. 52% of them felt that they can get EC directly from any pharmacy store without consultation to a doctor, 93% of the students feel that EC is not an effective routine method of contraception and only 27% said that it will result in more women suffering from STI/HIV.

Conclusions: Present study showed that, students were having above average knowledge about EC. Since they are the health care providers in future, giving proper training to them in acquiring good knowledge will help in dispensing the health education to the community especially youth in future.

Keywords: Awareness, Emergency contraception, Kerala, Medical students

INTRODUCTION

Emergency contraception (EC) or "post-coital contraception" or "mornings after pills" are the methods of contraception that can be used to prevent pregnancy in the first five days after sexual intercourse. ECs are intended to use following unprotected intercourse, contraceptive failure or misuse (such as forgotten pills, or breakage or slippage of condoms), rape or coerced unprotected sex. Unwanted pregnancy among young adults poses a major challenge to the reproductive health in developing countries because of unsafe abortions and

deliveries which increases the prevalence maternal mortality.² Because of early onset of menarche and decreasing age of starting of sexual activity, young adults are at risk to early unplanned and unprotected sexual intercourse leading to unwanted pregnancy and, subsequently, abortions.^{2,3} Among the available different contraception methods, emergency contraceptives are the only one that can be used after unprotected sexual intercourse, offering a second chance to prevent unwanted pregnancy.³ Emergency contraception prevents ovulation; fertilization and/or implantation, so it prevents pregnancy from occurring.¹

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.⁴

It has been observed that most of the adolescent's attitude towards premarital sex are becoming liberal and unintended pregnancies rates are high; their awareness of emergency contraceptives remains poor.⁴ Most adolescents begin their sexual activity without adequate knowledge about sexuality or contraception or protection against STIs/HIV.^{3,4} Since medical students are future health care providers and their awareness about emergency contraception will help in giving health education to the community, so we conducted this study with an objective to assess the knowledge about emergency contraception among second and third year medical students in a private medical college, Kannur, Kerala, India.

METHODS

It was a cross sectional study design which was conducted in a Private Medical College, Kannur, Kerala, India for 2 Months (June – July 2016). The medical students admitted to MBBS course during 2013 and 2014 (260 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

Data Collection

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

Data analysis

Data was entered in Microsoft Excel, descriptive statistics were analysed and presented in the form of frequencies and proportions.

RESULTS

Out of 260 students, 200 students participated in the study and mean age of the participants was 19.58±0.48 years. Among the study subjects, 58% (116%) and 42% (84) were females and males respectively. All of the respondents said they have heard about emergency contraception and 77% of the participants felt that the emergency contraceptives are a safe and effective method to prevent pregnancy after unprotected sexual intercourse. 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. About three fourth of the respondents said that the drug composition of the EC is similar to normal contraceptive pills but in higher dose. About 78.5% (157) were correctly aware about the correct timing of administration of EC i.e. within 72 hours of after unprotected sex (Table 1).

Table 1: Awareness about emergency contraception among the study participants.

Awareness about emergency contraception	Frequency n= 200	Percentage
Effectiveness of ECPs		
Highly effective (99%)	037	18.50
Three -fourth (75%)	139	69.50
Half (50%)	008	04.00
Less than 25%	013	06.50
Do not know	003	01.50
Drug composition of ECPs		
Same as OCPs	009	04.50
Same as OCPs but in higher dose	153	76.50
Different drug compared to OCPs	026	13.00
Do not know	012	06.00
Recommended time to take EC after unprotected sex		
Less than 72 hours	157	78.50
Within one week	007	03.50
After missed period	029	14.50
Do not know	007	03.50

ECPs- Emergency contraceptive pills; OCP- Oral Contraceptive pills

Table 2: Perception of study participants on emergency contraception- place of availability, provider and concerns.

Perceptions on ECP	Frequency n= 200	Percentage
Place of Availability ECPs*		
Public hospitals	91	45.50
Private hospitals	57	28.50
Institutional health centres	64	32.00
Pharmacies without prescription	104	52.00
Provider of ECPs*		
Doctor	124	62.00
Nurses	057	23.50
Pharmacists	108	54.00
ECPs are effective method of contraception for routine use		
Yes	005	02.50
No	186	93.00
Do not know	009	04.50
Concerns regarding usage of ECPs*		
Side effects	99	49.50
Some women may use it frequently instead of regular	104	52.00
contraceptives		
Men may exert pressure on women to use it regularly instead	86	43.00
of other contraception		
Will result in more women suffering from STI & HIV	54	27.00

ECPs- Emergency contraceptive pills; *Multiple options were allowed.

About 52% (104) of the students felt that they can get EC directly from any pharmacy store without consultation to a doctor, 62% (124) and 54% (108) of them told that doctor and pharmacists as the provider of EC respectively. Around 93% of the students feel that EC is not an effective routine method of contraception (Table 2).

Among the study population, 52% (104) felt that "some women may use it frequently instead of regular contraceptives" and only 27% said that it will result in more women suffering from STI/HIV. The most common source of information about EC was from Television (87.5%), followed by friends (8.5%) and health professionals (4%).

DISCUSSION

In this study, all the participants have heard about EC and it is similar to studies done by Reddy RN et al in India and Vahratian A et al in USA. 3.5 Around 77% of the participants felt that the emergency contraceptives are a safe and effective method to prevent pregnancy after unprotected sexual intercourse. 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 which was similar to study done by Reddy RN et al but higher compared to study conducted in Ethiopia. 3.6

About three fourth 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 and very good knowledge compared to study conducted in Ethiopia. About 78.5% 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 RK et al in India. 3.7

Around half of them felt that they can get EC directly from any pharmacy store without consultation to a doctor which was not a good attitude and it was less than study done among nursing students in India by Rahaman H et al.² More than half of them told that EC will be provided by pharmacist which was lesser compared to study of Rahaman H et al.² Around 93% 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 and only one fourth of them felt that EC use may increase the chance of STI/HIV infection among women which were good concerns about usage of EC.

In present study, students told that the most common source of information about EC was from Television. However, studies done by Reddy RN et al and Parey B et al found that common source of information about EC were from health professionals and friends respectively.^{3,8}

Limitations of the study was only two batch of students were included for the study. So, in present study the awareness about EC among medical students was above average.

CONCLUSION

Our study showed that, medical students were having above average knowledge about emergency contraception. Since they are the future health care providers having good knowledge regarding EC will be helpful for them delivering good health care services to the community. So giving proper training to them in acquiring good knowledge will help in dispensing the health education to the community especially youth in future.

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Institutional Ethics Committee

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