



AWARENESS OF EMERGENCY CONTRACEPTION AMONG MEDICAL STUDENTS

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ABSTRACT

This study was conducted to assess the awareness and knowledge of emergency contraceptive pills, among Medical students and to assess the knowledge of the ill effects of illicit use of emergency contraception MBBS students of Saveetha Medical College were taken after obtaining informed consent . . It's a descriptive Cross sectional study with a duration of 2 months. Data collection was done with a self-administered questionnaire with a sample size of 385. Results showed the awareness of emergency contraception among first year MBBS was 49% (girls) and 58% (boys) which, increased progressively to 100% among CRRI. 92% of boys and 70% of girls felt it can be used regularly without side effects in first year but, CRRIs knew its side effects From our study, we emphasize to introduce the curriculum on contraception and emergency contraception in early education itself.

KEYWORDS: Emergency contraception, medical students, post coital contraceptives



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INTRODUCTION

Emergency contraception, which is also known as post coital contraception is a contraceptive practice to prevent the unintended or unwanted pregnancy. Emergency contraception is to be adopted whenever conception is anticipated following unprotected sexual act or as a result of sexual assault .It is also used to prevent pregnancies due to contraception failure¹. Post coital contraceptive pills are highly beneficial in cases, condom breakage, slippage of vaginal condoms, missing doses of monthly oral contraceptive pills, in cases delayed intake of injectable contraceptives or ejaculation of semen due to failed withdrawal. Emergency contraception can be done with help of oral contraceptive pills or by inserting intrauterine contraceptive devices. Post coital contraceptive pills are easy to administer with good compliance. There are various regimens followed worldwide for emergency contraception, the most accepted one is World Health Organisation single dose or double progesterone based pills. Levonorgestrol 1.5 mg taken within five days of unprotected intercourse or Levonorgestrol 0.75mg as two tablets twelve hours apart within 72 hours of intercourse is found to be successful in preventing conception^{1,2}. Emergency contraception pills are so convenient and can be administered without any contraindication except in cases of already confirmed pregnancy. Alternate method of the World Health Organisation recommended emergency contraceptive practice is bases insertion of copper containing intrauterine device within five days of sexual act. Intra uterine devices are successful up to 99% in preventing unwanted pregnancies, however they need technical assistance and associated with pain , expulsion and rarely perforation¹.

Purpose of the study

Successful rate emergency contraception pills widely varies from 50-90 % . It is highly protective when it is taken as early as possible after intercourse at least not later than 72 years There are few reports suggesting that in many population idea of correct dosage and timing emergency contraception is poor and considerable education is required. People must also understand that emergency contraception pills are not day to day based. They are intended to prevent pregnancy as routine contraceptive practice, though side effects are few improper use of emergency contraception may cause nausea, vomiting, menstrual irregularities and even unwanted pregnancy when other contraceptive practices are not aided. Hence this study is conducted to know the current

knowledge of medical students on when and how to use emergency contraception. This planned observational study is conducted among medical students from first year to CRRIs, which will reflect the idea of their knowledge on the availability and use of emergency contraception. This study will also enlighten us the importance of teaching emergency contraception among pre-clinical students at an earlier stage than the current curriculum.

METHODOLOGY

To assess the awareness of emergency contraception among Medical students this study was conducted.where MBBS students of Saveetha Medical College after obtaining informed consent will be included in the study.Each batch will be addressed about the study with prior permission of Dean and respective HOD . It's a descriptive Cross sectional study undertaken after taking permission of IEC .The study duration being 2 months.Both male and female students were taken in the study. Students who are willing to participate in the study after signing informed consent were taken in the study.Students not willing to participate in the study were excluded from the study. A self-administered prevalidated questionnaire was given to collect data. To increase the quality of the data, most of the questions were adapted from previously conducted studies. Likewise, confidentiality and anonymity of the study was reassured.Assuming the level of knowledge regarding emergency contraception to be 50%. The sample size is estimated to be 385 for a relative precision of 10% @ 5% significance level.

RESULTS

Among the boys, who knew about emergency contraception (EC)in the 1st, 2nd, 3rd, 4th& 5th (C.R.R.I) years were 58%, 79%, 86%, 89% &100% respectively. There was an increase in trend and the linear trend is statistically significant (P<0.001) Among the boys, the proportion of those who answered the third question if emergency contraception is available in India correctly in the 1st, 2nd, 3rd, 4th& 5th (C.R.R.I) years were 39%, 53%, 68%, 78% & 92% respectively. There was an increase in trend and the linear trend is statistically significant (P<0.001) Among the boys, the proportion of those who answered the fifth question if EC prevents pregnancy correctly in the 1st, 2nd, 3rd, 4th& 5th (C.R.R.I) years were 37%, 47%, 62%, 76% & 86% respectively. There was an increase in trend and the linear trend is statistically significant (P<0.001) Among the boys, the proportion of those who answered the sixth

question if EC is the same as RU-486 (Mifepristone) correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 0%, 3%, 3%, 8% & 16% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.05$) Among the boys, the proportion of those who answered the seventh question recommended time of taking EC correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 8%, 32%, 43%, 68% & 81% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the boys, the proportion of those who answered the eighth question on recommended dose correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 11%, 24%, 27%, 32% & 59% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the boys, the proportion of those who answered the ninth question when should Intra Uterine Contraceptive Device (IUCD) placed correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years

were 3%, 8%, 8%, 19% & 41% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the boys, the proportion of those who answered the tenth question on safety of EC correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 37%, 34%, 49%, 65% & 70% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the boys, the proportion of those who answered the eleventh question if EC can be used regularly correct in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 8%, 18%, 35%, 41% & 57% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the boys, the proportion of those who answered the twelfth question if EC can be used regularly correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 26%, 34%, 70%, 73% & 84% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) $P < 0.001$.

Table 1

Shows the linearity and statistical significance of difference answers given by the boys from first medical year to internship.

Question	Trend χ^2	P value
Do you know what Emergency contraception is?	23.00	$P < 0.001$
Is it Available in India	22.54	$P < 0.001$
EC prevents pregnancy	26.05	$P < 0.001$
EC same as RU-486	0.963	$P < 0.05$
Recommended time to take ECPs	49.94	$P < 0.001$
Recommended number of dose	19.94	$P < 0.001$
Recommended time for IUCD on emergency contraception	21.34	$P < 0.001$
Safety of EC Use	14.16	$P < 0.001$
Most common side effect of emergency contraception	24.82	$P < 0.001$
Can emergency contraception be used as a regular contraception	36.10	$P < 0.001$

Among the girls, the proportion of those who answered if they know about EC in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 49%, 92%, 89%, 95% & 100% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the third question if emergency contraception is available in India correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 46%, 68%, 89%, 84% & 92% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the fifth question if EC prevents pregnancy correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 46%, 46%, 71%, 79% & 89% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the sixth question if EC is the same as RU-486 correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 3%,

5%, 5%, 13% & 18% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.05$) Among the girls, the proportion of those who answered the seventh question recommended time of taking EC correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 16%, 27%, 71%, 74% & 87% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the eighth question recommended dose correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 3%, 11%, 45%, 50% & 74% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the ninth question when should IUCD kept in emergency contraception correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 5%, 3%, 24%, 37% & 53% respectively. There was an increase in trend and the linear trend is statistically significant

($P < 0.001$) Among the girls, the proportion of those who answered the tenth question on safety of EC correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 30%, 32%, 58%, 68% & 82% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the eleventh question on side effects correctly in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 8%, 41%,

37%, 45% & 61% respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$) Among the girls, the proportion of those who answered the twelfth question if EC can be used regularly or not in the 1st, 2nd, 3rd, 4th & 5th (C.R.R.I) years were 30%, 46%, 76%, 76% & 84% gave the right answer respectively. There was an increase in trend and the linear trend is statistically significant ($P < 0.001$).

Table 2

Shows the linearity and statistical significance of difference answers given by the girls from first medical year to internship.

Question No	Trend X^2	P value
Do you know what Emergency contraception is?	32.57	$P < 0.001$
Is it Available in India	24.16	$P < 0.001$
EC prevents pregnancy	24.12	$P < 0.001$
EC same as RU-486	6.70	$P < 0.05$
Recommended time to take ECPs	53.10	$P < 0.001$
Recommended number of dose	52.65	$P < 0.001$
Recommended time for IUCD on emergency contraception	33.44	$P < 0.001$
Safety of EC Use	29.32	$P < 0.001$
Most common side effect of emergency contraception	18.73	$P < 0.001$
Can emergency contraception be used as a regular contraception	30.83	$P < 0.001$

For question no.2

Majority of the first year students have the knowledge about through media and friends, 2nd & 3rd year students have their knowledge from classes while the 4th & 5th (CRRI) year students have gained their most of the knowledge from the doctors

For question no.4

Majority of the 1st & 2nd year student believe that the pills are available only in the hospital administration. 3rd & 4th year students believe that the pills are available in the hospital administration & also from the medical practitioners while the 5th year students (CRRI) have told that these pills are also obtained over the counter

DISCUSSION

It is surprising though India was the first nation to start the family planning programme, still population control is something not an easy task for us. Apart from the differences in knowledge, attitude and practice of contraceptive methods among our population, knowledge and practice on emergency contraception is low. We may be wrong if we assume the teens from cities are knowing better about the use and misuse of emergency contraception than rural teens, difference is actually meagre which we can

understand from various studies^{3,4,5}. In a study done in Ethiopia by Nasir Tajure et al result showed participants who never heard of EC were 58.1%⁶. But in a study done in India by Sonia Puri et al Of the 1,017 college students 7.3% had knowledge about emergency contraceptive pills (ECP)⁷. This form the basis of our study, we wanted to know the knowledge of emergency contraception from our medical students. From our study, we are able to convey knowledge is comparatively low in teens and it grows as they progress to final year. It is also evident that source of information for first year students is usually from media rather than through curriculum. In our study there is no difference in knowledge of emergency contraception between boys and girls. About the availability of the drug, it is very unfortunate that our first year students lack knowledge and many of them believe that it is available only from hospital, this may seem to be encouraging but to avoid unwanted pregnancy related complication government of India approved Over The Counter sale of these medications. Our study is one among very few which was done on medical students, which revealed that our early teens need to be taught on emergency contraception, it can be reliably learnt that students apart from bio medical field are our major target group to impart clarity on emergency contraception as well as other contraceptive pills and methods

CONCLUSION

Emergency contraception is an important part of the over counter drug. There is a critical need for more information on this topic not only among the medical students but for the general population too. Use and misuse of emergency contraception is imperative from early teenage groups, there is definitive need of curriculum based teaching about the availability and proper use of emergency contraception even in higher secondary school level.

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CONFLICTS OF INTEREST

None.

Appendix – 1**QUESTIONNAIRE****Awareness of emergency contraception among medical students**

1. Do you know what is Emergency contraception?

- a) Yes
- b) No
- c) Not sure
- d) Don't know

2. Sources of information about

- a) Friends/relatives
- b) Media
- c) Class
- d) Doctor/gynecologist
- e) Other

3. Is it Available in India

- a) Yes
- b) No
- c) Not sure
- d) Don't know

4. Where do you obtain these pills?

- a) Over the counter.
- b) Medical practitioner
- c) Hospital administration

d) I don't know

5. EC prevents pregnancy

- a) True
- b) False
- c) Not sure
- d) Don't know

6. EC same as RU-486

- a) True
- b) False
- c) Not sure
- d) Don't know

7. Recommended time to take ECPs

- a) Within 24 hours
- b) Within 48 hours
- c) Within 72 hours
- d) I don't know

8. Recommended number of dose

- a) One dose
- b) Two dose
- c) Three dose
- d) I don't know

9. Recommended time for IUCD on emergency contraception

- a) Within 24 hours
- b) Within 72 hours
- c) Within 5 day
- d) I don't know

10. Safety of EC Use

- a) Safe, no risk
- b) Some complications, not serious
- c) Not safe
- d) Don't know

11. Most common side effect of emergency contraception

- a) Nausea and vomiting
- b) Menstrual disturbances
- c) Change in weight
- d) Behavioral disturbances

12. Can emergency contraception be used as a regular contraception

- a) Yes
- b) No
- c) Not sure
- d) Don't know

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