

# Awareness of Emergency Contraception among 1st Year Medical Students

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## ABSTRACT

**Introduction:** In order to safeguard the health of women, it is mandatory to cut down the incidence of unsafe abortions. Emergency contraception has the potential to greatly reduce the number of unintended pregnancies and thus helping in curtailing the rate of unsafe abortions. Aim of the study was to determine the knowledge of 1<sup>st</sup> year medical students about emergency contraception.

**Material and methods:** A questionnaire study was done on 100 1<sup>st</sup> year medical students at MMIMSR, Mullana. Simple percentages were used for statistical analysis.

**Results:** The results showed that all the students were aware of existence of emergency contraception. They also knew the correct time limit of 72 hours. But there is lack of knowledge about other aspects of emergency contraception like side effects, efficacy, its availability etc.

**Conclusion:** Because of increasing adolescent sexual activity and decreasing age of 1<sup>st</sup> sexual intercourse there is urgent need to educate students at the school level.

**Keywords:** emergency contraception, awareness, medical students

## INTRODUCTION

Globally 20 million illegal abortions take place every year and out of this 97% occur in developing countries.<sup>1</sup> Unintended pregnancy poses a major challenge to the reproductive health of young adults in developing countries. Some young women with unintended pregnancies obtain abortions—many of which are performed in unsafe conditions—and others carry their pregnancies to term, incurring risks of morbidity and mortality higher than those for adult women.<sup>2</sup> In the U.S, it is estimated that emergency contraception could annually prevent 1.7 million unintended pregnancies and the number of induced abortions would decrease by about 40%.<sup>3</sup> In developing countries about 30% of women give birth to the first child before the age of 20.<sup>4</sup> Emergency contraception has the potential to greatly reduce the number of unintended pregnancies. Many women do not know of emergency contraception. Even if they are aware, accurate and detailed knowledge is lacking. Therefore availability must be accompanied by education and motivation. The aim of the study was to determine the knowledge of 1<sup>st</sup> year medical students about emergency contraception.

## MATERIAL AND METHODS

A questionnaire study was done on 1<sup>st</sup> year medical students in MMIMSR, Mullana, Ambala after obtaining the ethical clearance from the university ethical board. All the study students were in the age group of 17-19 years and were recruited for study after taking written informed consent.

In India around 19% of the population is constituted of adolescents, of which 90 million are between 15 and 19 years

of age.<sup>5</sup> Now days there is increasing adolescent sexual activity and decreasing age at first sex. The average age for first sexual intercourse in India is 17.4 years for boys and 18.2 years for girls.<sup>6</sup> A questionnaire consisting of 10 questions regarding different aspects of the emergency contraceptive pill was made. Students were told that the questionnaire was confidential and anonymous. They were encouraged to complete it honestly and without discussing with their classmates.

The questionnaire was given to 100 students. Out of which 49 were boys and 51 girls. Till date most of the studies have been done on non-medicos. A study done by Puri S et al<sup>7</sup> among university students in Chandigarh also focused mainly on non-medical students and excluded medicos assuming that there is good amount of awareness regarding contraception amongst them. So this study was undertaken to know how much medical students are different from their non-medical counterparts regarding awareness of emergency contraception.

## STATISTICAL ANALYSIS

Descriptive statistics were used to infer results and Microsoft Word 2007 was used to generate tables.

## RESULTS

All the students (100%) had heard of the emergency contraceptive pill (ECP) suggesting that there is a good awareness of its existence amongst teenagers. When asked how long after intercourse the ECP could be taken, 78% of boys and 86% of girls knew the correct time limit of 72 hours; the others answered either 24 or 48 hours. None of them answered 12 hours. 2% of boys and 8% of girls did not know the answer. Our study shows that teenagers are unaware of the number of times it can be used in a year. Half of the students did not know the answer. One third of the students think it can be used more than twice in a year. 67% of the girls knew that it is not 100% effective in preventing pregnancy while only 49% of the boys could answer it correctly. 24% of the boys did not know the answer while 35% think it is 100% effective in preventing pregnancy. A large number of students were aware that emergency contraception does not protect against sexually transmitted infections. Regarding the availability of the drug, 53% of the boys knew that it could be obtained either from a doctor or a pharmacist. Few of the girls were aware of over the counter availability of drug. 46% of

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	Boys %	Girls %	Boys and girls %
Q1. Have you heard of the emergency contraceptive pill, also known as the morning after pill?			
Yes	100	100	100
No	0	0	0
Q2. How long after having intercourse can the emergency contraceptive pill (morning after pill) be taken?			
Up to 12 hours	0	0	0
Up to 24 hours	6	4	5
Up to 48 hours	14	2	8
Up to 72 hours	78	86	82
Don't know	2	8	5
Q3. How many times can the emergency contraceptive pill be used in a year?			
Once	10	4	7
Twice	12	6	9
More than two times	30	33	32
Don't know	52	57	55
Q4. Is the emergency contraceptive pill 100% effective in preventing pregnancy?			
Yes	35	25	30
No	49	67	58
Don't know	16	8	12
Q5. Does the emergency contraceptive pill also protect against some sexually transmitted infections?			
Yes	10	16	13
No	84	82	83
Don't know	6	2	4
Q6. Where can a 16 year old girl get the emergency contraceptive pill?			
% stating doctor	29	46	37
% stating pharmacist	18	27	22
% stating doctor/ pharmacist	53	27	40
Q7. Can a doctor give a girl who is 16, the emergency contraceptive pill without telling her parents?			
Yes	8	4	6
No	84	88	86
Don't know	8	8	8
Q8. Does emergency contraceptive pill have serious side effects?			
Yes	53	46	50
No	31	25	28
Don't know	16	29	23
Q9. Can the emergency contraceptive pill be used if a woman is already taking the regular contraceptive pill?			
Yes	24	16	20
No	49	49	49
Don't know	27	35	31
Q10. How many tablets of emergency contraceptive pills to be taken after a single act of unprotected intercourse?			
Single tablet	72	61	67
Two tablets	4	4	4
Multiple tablets	4	2	3
Don't know	20	33	27

the girls answered it could be obtained only from a doctor. So this study shows that even 1<sup>st</sup> year medicos do not know that it can be obtained from a pharmacist without the prescription of doctor. Most of the students (girls-88%, boys-84%) did not know that a doctor can give the emergency contraceptive pill to a 16 years old girl without telling her parents. When we asked if emergency contraception has serious side effects, 53% of boys and 47% of the girls answered "YES". Only 25% of girls and 31% of boys thought it to be safe. 29% of the girls did not know the answer, thereby reflecting the incomplete knowledge regarding ECP even among 1<sup>st</sup> year medical students. When asked whether the emergency contraceptive pill could be used if a woman was already taking the ordinary contraceptive pill, there was a general lack of knowledge among the students. Half of the students answered that it can't be taken by regular pill

users. 35% of girls and 27% of boys did not know the answer. Boys were more aware (72%) regarding the number of pills than girls (61%). Very few students answered two or multiple doses.

## DISCUSSION

Our study shows that there is a good awareness of its existence of emergency contraception amongst teenagers. A study done by Pankaj Kumar Mandal<sup>8</sup> in rural area of Kolkata showed that only 61% of the students had heard of emergency contraception. This huge difference regarding awareness of emergency contraception might be because our students belonged to urban India and from upper socioeconomic status. In the present study majority of the students knew the correct time limit of 72 hours whereas in a study done by Puri S et al<sup>7</sup> only 14.7% of the students knew about correct timing of use. This variation in results of two studies might be because we have interviewed

only medical students. Students should be made aware that ECP is not to be used as routine contraceptive method but at the same time they should be told that there is no limit to the number of times it can be used in a year.<sup>9</sup> A potential barrier to women presenting for the (ECP) is the fear that they might be denied it because of overuse.<sup>10</sup> Girls are much more aware of its efficacy than boys. This difference might be because boys have fewer opportunities to receive information and counseling about sexuality, contraception and prevention as they do not need to consult a physician to get their contraception. If boys get the chance to discuss sexual issues with their partner or with a health professional, their awareness improves significantly. Confidentiality is an essential part of family planning medicine. Doctors must encourage the teenagers to inform their parents but should not force them to do so, with the exception of when child protection becomes an issue.<sup>10</sup> This study shows that vast majority of young teenagers are unaware that emergency contraception can be obtained confidentially. Although in many situations of missed pills the emergency contraceptive pill is not required, if pills are missed at certain times of the menstrual cycle or multiple pills are not taken, there may be risk of pregnancy. Users of the oral contraceptive pill should be aware that they are not excluded from the use of emergency contraceptive pill, should they require it.<sup>10</sup>

Though there is various commercial pills available in the market but "I" pill is the most commonly used and widely publicized in the social media so a vast majority of students knew that only a single pill is to be taken after a single act of intercourse. Boys were more aware (72%) regarding the number of pills than girls (61%). This might be because of more inclination of boys towards social media than girls.

## CONCLUSION

From this study we concluded that 1<sup>st</sup> year medical students are no different than other under graduates except that they are more aware of its existence and correct timing of use but there is lack of knowledge about the safety of drug and scenarios in which it can be used. So there is a need to educate adolescents not only about the existence of drug but also about over the counter availability, its efficacy in preventing pregnancy and conditions in which it can be used. This information should be included in school sex education programs. It is also the responsibility of doctors and other health care providers to make teenagers aware of various issues regarding emergency contraceptive use. Future policies should emphasize in designing and implementing different educational programs in order to meet these needs and prevent further unwanted pregnancies.

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