

ORIGINAL RESEARCH

Awareness and Use of Emergency Contraception Among Female College Students

Navinkumar Angadi¹, Shubha D B¹

ABSTRACT

Introduction: Women worldwide are at greater risk of complications of unintended pregnancy, particularly young women and adolescents girls. The risk increases many folds in developing countries due lack of proper knowledge, accessibility and availability of contraceptives. Preventing unintended pregnancy among sexually active young women of paramount importance which will in turn help in achieving MDG 5 (Improve maternal health: Target 5.B – Achieve universal access to reproductive health). To study awareness and use of emergency contraceptives among female college students, Davangere city.

Study Design: Cross-sectional, questionnaire-based study.

Materials and Methods: This study was conducted among college-going graduate female students of various colleges in Davangere city. Multi-stage systematic random sampling was used to select the respondents.

Results: Of 250 participants, 190 (91%) were heard of emergency contraceptives. Majority (73%) students didn't know the indications/circumstances for use of ECP. Maximum (70%) told EC were available in the form of oral pills. Majority (53%) of the participants opined that EC is safe for its users and 102 (54%) agreed they would recommend EC to others. Only 8% had ever used EC. Out of these users, 12 (75%) of them told it's difficult to get EC when needed and 10 (63%) told cost of EC was high.

Conclusions: In our study majority of young women had heard about emergency contraceptives but the knowledge about when to use or how to use them was very poor. Also availability and accessibility of EC was a major concern among those practicing them. Creating awareness and accessibility to emergency contraceptives among sexually active young women is need of the hour.

Keywords: Emergency Contraceptive; Awareness; Practice; College girls

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¹Assistant Professor, Department of Community Medicine, J J M Medical College, Davangere, Karnataka, India.

Corresponding author: Dr. Navinkumar Angadi, Assistant professor, Department of community medicine, J J M Medical College, Davangere, Karnataka, India.

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INTRODUCTION

Emergency contraception (EC)/post-coital contraception is the method of contraception which can be used in the first few hours/days of intercourse to prevent unintended pregnancy. Emergency contraceptives can be used following unprotected intercourse/contraceptive failure or misuse/rape/coerced sex. EC is available in two forms, as oral pills and intrauterine devices. Among oral pills Levonorgestrel pills, can be taken as a single dose (1.5mg) within five days of unprotected sex or in two doses (0.75mg 12 hours apart). A copper containing intrauterine device can also be used as an EC if it is inserted within five days of unprotected intercourse.¹ The unintended or unplanned pregnancies often lead to unsafe abortions which carry high risk of morbidity and mortality among women particularly among sexually active adolescent girls, which can be avoided by proper use of emergency contraceptives.²

Use of emergency contraception in developing country like India will play a very important role in reducing maternal mortality and morbidity and improving women's health thus help in achieving MDG.⁵ Also indirectly contribute towards reduction of perinatal mortality and morbidity by preventing unwanted births thus help in achieving MDG 4 (reduce infant mortality).³ As per NFHS III, knowledge about EC is 20 per cent in men and 11 per cent in women in India which is very poor compared to developed countries.⁴

Literature is also scarce in this field. Hence present study was undertaken with the objectives of assessing awareness and use of emergency contraceptives among female college students. Aim of the study was to check the awareness and use of emergency contraceptives

among female college students of Davangere city.

MATERIALS AND METHODS

This cross sectional study was conducted for 3 months from 1st October 2014 to December 31st 2014 among 250 female college students from 3 different colleges in Davangere city. A two-stage systematic random sampling technique was applied, the first stage of which included random selection of 3 colleges in Davangere. In order to select these 3 colleges, a list of all the private and public colleges was obtained. This list included colleges which provide graduate degrees. In the second stage, two classes were selected randomly from each sampled college. The number of students in a class ranged from 35 to 50. Only female students present on the day of the interview in the sampled classes were requested to participate in the study. Face to face interview was done to obtain information on various questions regarding emergency contraceptives.

With regard to awareness of EC, the study was done by asking the question, "Have you ever heard about emergency contraception? Out of 250 participants 190 told they have heard of emergency contraceptive and these formed the final sample for study. After taking verbal consent, students were interviewed by using predesigned, pretested, semi-structured questionnaire. Confidentiality of information was ensured. Statistical analysis was done by using proportion and Chi-square test.

RESULTS

The age of study participants ranged from 18 to 23 years. The mean age was 19.82 ± 1.19 years. 88 (46%) participants were from rural area and 102 (54%) were from urban area. Majority of participants 184 (97%) were unmarried.

Knowledge towards emergency contraceptives (EC) study population.

In our study out of 250 participants, 190 (91%) had heard of emergency contraceptives (EC). The main source of information were school teachers (35%) followed by the doctor or other health care personnel (30%). Out of 190 who had heard of EC, 154 (81%) told that EC prevents pregnancy. 93 (49%) answered the correct time to take emergency contraceptives after unprotected sex and 34 (18%) answered EC should be taken three hours before sex. Only 30 (16%) were knowing about indications for EC. When we asked about various methods of EC, 133 (70%) told oral pills and 54 (28%) told IUCD as a method of EC. 58 (31%)

of participants were knowing about correct interval for repeat dose. 39 (21%) told nausea and vomiting as most common side effect of EC followed by bleeding disorders. 177 (62%) told that EC is available for free of cost at government hospitals. 127 (67%) told EC protects against sexually transmitted diseases. 44 (23%) told EC can be used regularly. (See table 1).

Attitudes towards EC among study population.

100 (53%) participants opined that EC is safe for its users. 87 (46%) felt EC would discourage consistent use of condom. 102 (54%) agreed to recommend EC to others. 126 (66%) opined that EC is better than abortion. 95 (50%) felt that purchasing EC will be embarrassing. 100 (53%) felt EC is good for reproductive health. 164 (86%) opined that awareness programmes about EC should be promoted by government. (See table 2).

Use of Emergency Contraceptives (EC) among study population.

In our study out of 190, 16 (8%) had ever used EC. out of these users, for 7 (44%) participants EC was prescribed by health care providers, 9 (56%) directly purchased from pharmacist. 12 (75%) of the users told its difficult to get EC when needed and 10 (63%) told cost of EC was high. (see table 3)

Knowledge of participants according to their Age, native place and marital status

76 (49%) participants in the age group of 18-20, 15 (42%) in the age group of 21-23 had good knowledge. This difference was not statistically significant. 46 (52%) participants from rural areas and 45 (44%) from urban areas had good knowledge. This difference was not statistically significant. 3 (50%) married and 88 (48%) unmarried participants had good knowledge. This difference was not statistically significant. (see table 4)

Attitude of participants according to Age, native place and marital status

94 (62%) participants in the age group of 18-20 and 27 (75%) in the age group of 21-23 had favourable attitude. This difference was not statistically significant. 50 (57%) participants from rural areas and 72 (71%) from urban areas had favourable attitude. This difference was not statistically significant. 3 (50%) married and 119 (65%) unmarried participants had favourable attitude. This difference was not statistically significant. (see table 5).

DISCUSSION

In the present study 91% of study population had heard

Variable	No.	%
1. ECP prevent pregnancy		
Yes	154	81
No	34	18
Don't know	2	1
2. Time to take Emergency Contraceptive pills		
Within 72 hours	93	49
3 hrs. before sex	34	18
3 days after sex	20	10
More than 3 days	23	12
Don't know	20	11
3. Indications/ circumstances for EC		
After unprotected sex	28	15
Failed regular contraceptive methods	2	1
Both i and ii	20	11
Don't know	140	73
4. Methods of EC		
pills	133	70
IUCD	54	28
Don't know	3	2
5. Interval for repeat dose		
6 hours	16	8
12 hours	58	31
24 hours	77	41
48 hours	34	18
Don't know	5	3
6. Common side effect		
Nausea and vomiting	39	21
Weight gain	10	5
Menstrual irregularities	20	11
Infertility	8	4
Bleeding disturbances	29	15
Don't know	84	44
7. EC available for free of cost at government centres		
Yes	117	62
No	73	38
8. EC protects against Sexually Transmitted Diseases		
Yes	127	67
No	63	33
9. EC can be used regularly		
Yes	44	23
No	146	77
Table-1: Knowledge towards emergency contraceptives (EC) among study population.		

of emergency contraceptives and almost similar finding was observed by Nisha Relwani et al⁵ (92.7%). Our study observation is higher than the other studies conducted by Jimma Likisa Lenjisa et al⁶ (62.5 %), Zewdu Shewangizaw Weret et al⁷ (48.2%) and Asmare Tesfa

Variable	No	%
1. EC is safe for its users		
Yes	100	53
No	90	47
2. EC would discourage consistent use of condom		
Yes	87	46
No	103	54
3. You recommend EC to others		
Yes	102	54
No	88	46
4. Using EC is better than abortion		
Yes	126	66
No	64	34
5. Do you think Purchase of EC will be embarrassing		
Yes	95	50
No	95	50
6. EC is good for reproductive health		
Yes	100	53
No	90	47
7. Awareness programmes to be promoted by government		
Yes	164	86
No	26	14
Table-2: Attitude towards emergency contraceptives (EC) among study population		

Variable	No	%
1. Ever used EC methods		
Yes	16	8
No	174	92
2. EC methods prescribed by		
Health care providers	7	44
Pharmacist	9	56
3. Difficult to get EC when needed		
Yes	12	75
No	4	25
4. Cost of the EC methods		
High	10	63
Free at FHCs	6	37
Table-3: Use of emergency contraceptives (EC) among study population.		

et al⁸ (40.5%).

The main source of information in current study was mass media like TV/Radio/ Newspaper (35%) and similar observation was reported by other studies like Wegene Tamire et al⁹ (38%), Baiden F et al¹⁰, Asmare Tesfa et al⁸ (35.7%). But it is lower than study conducted by Nisha Relwani et al⁵ (65.5%)

Variable	Knowledge score		
	Poor (<50%)	Good (≥50%)	
Age			
18-20	78 (51%)	76 (49%)	X ² =0.69, df=1, P=0.40
21-23	21 (58%)	15 (42%)	
Native place	<50%	≥50%	
Rural	42 (48%)	46 (52%)	X ² =1.25, df=1, P=0.26
Urban	57 (56%)	45 (44%)	
Marital status	<50%	≥50%	
Married	3 (50%)	3 (50%)	X ² =0.011, df=1, P=0.91
Unmarried	96 (52%)	88 (48%)	
Note:P value >0.05 not significant			
Table-4: Knowledge of participants according to their Age, native place and marital status			

Variable	Attitude score		
	Poor (<50%)	Good (≥50%)	
Age			
18-20	59 (38%)	94 (62%)	X ² =2.57, df=2, p=0.27
21-23	9 (25%)	27 (75%)	
Native place	<50%	≥50%	
Rural	38 (43%)	50 (57%)	X ² =4.57, df=2, p=0.101
Urban	30 (29%)	72 (71%)	
Marital status	<50%	≥50%	
Married	3 (50%)	3 (50%)	X ² =0.56, df=2, p=0.75
Unmarried	65 (35%)	119 (65%)	
Note: P value ≥0.05 not significant.			
Table-5: Attitude of participants according to Age, native place and marital status			

70% knew that EC is available in the form of oral pills which is lower compare to other studies like Nisha Relwani et al⁵ (78.5%), Asmare Tesfa et al⁸ (77.6%) and Sonia puri et al¹¹ (73%) and higher than study by Jimma Likisa Lenjisa et al⁶ (46.3%). 28% of girls were knowing that IUCD can be used as EC and this finding is almost similar with study conducted by Nisha Relwani et al⁵ (26.6%) and higher than study conducted by Sonia puri et al¹¹ (14.9%), Asmare Tesfa et al⁸ (14.3%) and Jimma Likisa Lenjisa et al⁶ (3%).

31% of study population knew the indications for EC which is lower than studies conducted by Asmare Tesfa et al⁸ (93.9%), Nisha Relwani et al⁵ (46%) Jimma Likisa Lenjisa et al⁶ (90%).

In the present study 49% of participants knew the correct timing for taking EC after unprotected sex and similar finding was observed by Jimma Likisa Lenjisa et al⁶ (49.3 %). But this finding is higher than other studies conducted by Baiden F et al¹⁰ (11.3%), Eugene J Kongnyu et al¹² (5.7%), Zewdu Shewangizaw Weret et al⁷ (27%), Asmare Tesfa et al⁸ (42.6%) and Nisha

Relwani et al⁵ (42.4 %).

21% girls mentioned nausea, vomiting as most common side effect of EC which is higher than study conducted by Nisha Relwani et al⁵ (16.6%). But in a study conducted by Sonia puri et al¹¹ participants told hormonal changes (97%) was most common side effect followed by vomiting (83%).

47% of study participants opine that EC is not safe for its users and Similar findings were observed by Baiden F et al.¹⁰ But our study result is lower than study by Nisha Relwani et al⁵ (63%), Eugene J Kongnyu et al (65%).¹²

46% girls opine ECPs would discourage the consistent use of condoms and this finding is higher compared to other studies conducted by Nisha Relwani et al⁵ (36.5%) and Asmare Tesfa et al⁸ (40.9%) and lower compare to study by Baiden F et al¹⁰ (53.4%) .

54% of girls agreed to recommend EC to others and our results are lower than other studies conducted by Jimma Likisa Lenjisa et al⁶ (58.1%), Asmare Tesfa et al⁸ (64.3%) and Nisha Relwani et al⁵ (70%).

In the present study 8% reported that they had used ECs before and our results are higher than other studies conducted by Nisha Relwani et al⁵ (5.7%), Eugene J Kongnyu et al¹² (7.4%) and lower than studies like Jimma Likisa Lenjisa et al⁶ (36.5%) and Asmare Tesfa et al⁸ (25.0%).

CONCLUSION

We conclude that the knowledge about the EC was poor and there was unfavourable attitude towards Emergency contraceptives among female college students. The use of emergency contraceptives was also poor. Factors like age, native place and marital status weren't of any statistical significance in relation to their awareness regarding EC.

RECOMMENDATION

Efforts should be focused on providing health education with focus on the available methods, correct timing of use, and the health effects of emergency contraceptives. It should be done through all major means of communications such as peers, media (radio, television, posters and brochures), as well as delivering messages through health facilities. Health education should include young students, in order to reduce unintended pregnancies, many of which result in unsafe abortion and take a large toll on woman's health.

The limitation of our study was that it was based on only female college students. We cannot guarantee that students provided honest answers to the questions, since the survey involved a sensitive matter.

The strength of our study lies in the fact that it focused on young females who also are important candidates for awareness generation with respect to EC.

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