

Knowledge of Emergency Contraception among Nursing students of Rohilkhand Medical College and Hospital, Bareilly

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Abstracts:Background & Objectives: Even after so many years of introduction of ECP, its awareness among community members as well as providers is very low. To assess the knowledge towards emergency contraception among nursing students. **Methods:** The cross sectional study involved a survey amongst married nursing students of Rohilkhand Medical College, Bareilly. A structured pretested schedule was used to collect data. Chi- square test was used to analyze data. **Results:** Nearly two third (32 out of 50) of females had heard about EC. Respondents who were aware of EC most commonly reported that they had first heard about EC from television (68.75%). Majority of those aware knew about pills (87.5%). Majority (85.5%) of subjects who had heard of EC knew that they could obtain EC from a chemist. In addition, most participants (81.25%) knew about the appropriate interval for efficacy between unprotected sex and taking EC. Nearly one third respondents had ever used an emergency contraception method. Only 34.0% were aware of side effects of an emergency contraceptive. **Conclusion:** Correct knowledge about EC should be strengthened among the health providers. This will help to reduce the number of induced abortions in future among them as well as general population. [Verma R et al NJIRM 2012; 3(5) : 17-20]

Key words: Emergency contraception, nursing students

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Introduction:In India, more than 75% of pregnancies are unplanned and a quarter of them are undesired¹. Annually almost 11 million abortions take place in the country, and more than half of these are unsafe, accounting to high maternal morbidity and mortality rates². The irony of fact is many of these abortions can be averted by simply generating awareness in females about various contraceptive measures³.

In spite of availability of many contraceptive techniques, the couple protection rate (41%) continues to be inadequate⁴. Most couples in India do not want to use a contraceptive method on a long-term basis for the fear of side-effects. Hence, unwanted and unplanned pregnancies are quite common⁵.

Unprotected sex, failure of barrier methods and sexual violence also often lead to an unwanted pregnancy. In such situations emergency contraceptive pills give women a last chance to prevent an unwanted pregnancy. This would protect a large number of women from the trauma of induced abortions, as well as reduce morbidities and mortalities from abortions and pregnancy complications.

Government of India introduced ECP in the National Family Planning Program in 2003. It is currently available in two oral dose regime of 0.75 mg Levonorgestrel each, first dose to be taken within 72 hours of unprotected sexual intercourse and the second dose to be taken 12 hours after the first dose. ECP is being used as a prescription drug by practitioners and is available at the Primary Health Centre and Community Health Centre level. But even after so many years of introduction of ECP, its awareness among community members as well as providers is very low.

To make ECP effective in preventing unwanted pregnancies, it is critical that potential users as well as providers be made aware of correct use of ECP. There are very few Indian studies regarding awareness of Emergency contraception among the health care providers. With this background the present study was carried out to assess the level of knowledge towards emergency contraception and the pattern of utilization of family planning services among nursing students of Rohilkhand Medical College and Hospital, District Bareilly.

Material and Methods: The cross sectional three month study was carried out among married nursing students of Rohilkhand Medical College

and Hospital, Bareilly, Uttar Pradesh after taking permission from the institutional ethical committee. Purposive sampling was used. Those women who were non cooperative or refuse to provide the necessary information were not included in the study. All married nursing students aged between 15-45 years present were taken for the purpose of study after informed consent. Ethical clearance was obtained from institutional review board.

The study involved the use of a structured pretested and predesigned questionnaire to assess study subjects' pattern of utilization of family planning services. Confidentiality and anonymity of the study was reassured. The data was collected while students were in class rooms. The instructors cooperated with the investigators in disseminating the questionnaire. In the end, the questionnaires were gathered and checked for completeness by the investigators.

Dependent variables: Contraceptive usage and awareness about emergency contraception.

Independent variables: Age, age at marriage, parity, type of family and socioeconomic status.

Data regarding socio-demographic characteristics (Age, type of family and socioeconomic status using modified Prasad's classification was collected⁶. Specific questions related to parity, family planning method used and knowledge about emergency contraception was asked.

Data entry and statistical analysis was performed using the Microsoft Excel and SPSS windows version 14.0 software.

Result: Socio-demographic characteristics: Out of 50 students in this study, a higher proportion of females was aged between 24-29 yrs (50.0%) and was married after 18 years of age (86.0%). Majority of respondents belonged to low socioeconomic status (94.0%). Most participants were primiparous (64.0%) and belonged to nuclear families (90.0%). (Table 1)

Use of family planning methods: A total of 56.0 % females were currently using family planning methods. A higher proportion of them were using oral contraceptive pills (53.57%) and used condoms (28.58%). Majority (82.14%) of females had obtained the family planning method at last use from a private institute. (Table 2)

Table:1 Socio-demographic profile of respondents

Characteristics	Total (n=50)
Current family planning method users	28 (56.0%)
Type of family planning method being used	(n=28)
Condom	8 (28.58%)
IUD	3 (10.71%)
OCPs	15 (53.57%)
Sterilised	1 (3.57%)
Coitus interruptus	1 (3.57%)
Place from where Family planning method was obtained at last use	(n=28)
Government institute	5 (17.86%)
Private institute	23 (82.14%)

Table:2 : Use of family planning methods among nursing students of Bareilly

Characteristics	No. of subjects (n=50)	
Age	18-23 yrs	22 (44.0%)
	24-29 yrs	25 (50.0%)
	>= 30yrs	3 (6.0%)
Age at marriage	< 18 yrs	7 (14.0%)
	>= 18 yrs	43 (86.0%)
Socioeconomic status	Upper Middle class	1(2.0%)
	Lower middle class	2 (4.0%)
	Lower class	47 (94.0%)
Parity	Primiparous	32 (64.0%)
	Multiparous	18 (36.0%)
Type of family	Nuclear	45 (90.0%)
	Joint	5 (10.0%)

Knowledge and use of emergency contraception: Nearly two third of females had heard about EC. Respondents who were aware of EC most

commonly reported that they had first heard about EC from television (68.75%). Majority of those aware knew about pills (87.5%). 85.5% of subjects (n = 32) who had heard of EC knew that they could obtain EC from a chemist. In addition, most participants (81.25%, n = 32) knew about the appropriate interval for efficacy between unprotected sex and taking EC. Nearly one third respondents had ever used an emergency contraception method. Only 34.0% were aware of side effects of an emergency contraceptive. (Table 3)

Table 3: Awareness, knowledge and use of emergency contraception among nursing students

Characteristics	Total (n=50)
Ever heard about emergency contraception	32 (64.0%)
Source of information (n=32)	
Television	22(68.75%)
Radio	1 (3.12%)
Health worker	8 (25.0%)
Husband	1 (3.12%)
Emergency contraceptive methods known (n=32)	
Pills	28 (87.5%)
IUD	4 (12.5%)
Source of getting EC method (n=32)	
Health worker	3 (9.37%)
Hospital	1 (3.12%)
Chemist	28 (87.5%)
Recommended time to take ECPs (n=32)	
before unprotected sexual intercourse	2 (6.25%)
within 72 hours	26 (81.25%)
more than 72 hours	1 (3.12%)
don't know	3 (9.37%)
Have ever used an emergency contraceptive method	16 (32.0%)
Aware of side effects of an emergency contraceptive	17 (34.0%)

Knowledge about EC was significantly higher among those married after the age of 18 years. (Table 4)

Table 4: Unadjusted (crude) associations with awareness of emergency contraception among the respondents

Characteristics	Heard of EC (n=32)	Not heard of EC (n=18)	P-value
Age	18-23 yrs	17 (34.0%)	.165
	24-29 yrs	14 (28.0%)	
	>= 30yrs	1 (2.0%)	
Socioeconomic status	Upper middle class	1 (2.0%)	.693
	Lower middle class	1 (2.0%)	
	Lower class	30 (60.0%)	
Age at marriage	< 18 yrs	2 (4.0%)	.035
	>= 18 yrs	30 (60.0%)	
Parity	Primiparous	23 (46.0%)	.122
	Multiparous	9 (18.0%)	
Type of family	Nuclear	29 (58.0%)	.844
	Joint	3 (6.0%)	

Discussion: A total of 56.0 % females were currently using family planning methods in our study. According to National Family Health Survey overall 56.0% of currently married women aged between 15-49 years used a family planning method⁷. Nearly two third of females had heard about EC in the current study. In a recent study conducted among Sikkim nursing students, 86.0 % of them had heard about EC. In the results from the National Family Health Survey, the knowledge about EC was only 11% in women⁷.

Tripathi et al carried a study among health care providers in New Delhi and concluded that none of the respondents was aware of EC⁸. Takkar et al carried a cross sectional study amongst 151 nursing staff and reported that 12.58% of study population was aware about EC⁹. Only about two-thirds of college students in Nepal had ever heard about EC¹⁰. 81% of nurses had heard of EC in a study conducted in Nigeria¹¹

The respondents in this study who were aware of EC most commonly reported that they had first heard about EC from television. The main source of information of EC reported was Media (69.3%) in a study conducted among female students in Ethiopia by Ahmed et al¹².

Most participants (81.25%) in our study knew about the appropriate interval for efficacy between unprotected sex and taking EC. Out of 334 students from Ethiopia, who were aware about EC, only 38.6% responded to the correct time of using EC¹³. Mean knowledge score regarding EC for nurses (2.7), was significantly lower than for physicians (4.0) in a study conducted by Wallace et al¹⁴. Thirty two percent respondents had ever used an emergency contraception method in this study. Only 5.7% of engineering female students in Nagpur had ever used an EC method¹⁵.

Conclusion: Correct knowledge about EC should be strengthened among the health providers. This will help to reduce the number of induced abortions in future among the health providers and the general population.

References:

1. Puri S, Bhatia V, Sehgal A, Mangat C. Imparting knowledge of Emergency Contraception to College going students. Is it dangerous? The Internet Journal of Epidemiology 2008; 6:1-10.
2. Mittal S, Lakhatia M, Kumar S, Singh S. Contraceptive awareness and acceptance in Indian Metropolitan city. Consortium on National consensus for Emergency Contraception 2001;91.
3. Singh S, Mittal S, Anandalakshmy PN, Goel V. Emergency contraception: knowledge and views of doctors in Delhi. Health and Population Perspectives and Issues 2002; 25:45-54.
4. Ball D. Hormonal emergency contraception: Increasing awareness and access Indian J Med Sci 2007; 61: 323-4.
5. Consortium on National Consensus for Emergency Contraception in India, published by WHO-CCR in Human Reproduction, AIIMS, New Delhi ; 2001
6. Agarwal AK. Social classification: The need to update in the present scenario. Indian J Community Med 2008; 33:50-1
7. Summary of key findings. India fact sheet, NFHS- 3, 2005-06. Available from: <http://www.nfhsindia.org/summary.html>. [cited in 2010].
8. Tripathi R, Rathore AM, Sachdev J. Emergency contraception: knowledge, attitude and practice among health care providers in North India. J Obstet Gynecol Res 2003; 29:142-6.
9. Takkar N, Goel P, Saha PK, Dua D. Contraceptive practices and awareness of emergency contraception in educated working women. Indian J Med Sci 2005; 59:143-49
10. Adhikari R. Factors affecting awareness of emergency contraception among college students in Kathmandu, Nepal. BMC Women's Health 2009, 9:27
11. Ebuehi OM , T Ebuehi OA, Inem V. Health care providers knowledge of attitudes toward and provision of emergency contraceptives in Lagos, Nigeria. International Family Planning Perspectives 2006, 32(2):89–93.
12. Ahmed et al.: Assessing knowledge, attitude, and practice of emergency contraception: a cross- sectional study among Ethiopian undergraduate female students. BMC Public Health 2012; 12:110.
13. Zeleke G, Zemenay Z, Weldegerima B. Knowledge, Attitude and Practice of Emergency Contraception among female Bahir Dar University Students, Northwest Ethiopia. Ethiopian Journal of Reproductive Health 2009 (3):159-64.
14. Wallace JL, Justine Wu, Weinstein J, Gorenflo DW, Feters MD. Emergency Contraception: Knowledge and Attitudes of Family Medicine Providers. Fam Med 2004;36(6):417-22.
15. Relwani N, Saoji A, Kasturwar NB, Nayse J, Junaid M, Dhattrak P. Emergency contraception: exploring the knowledge, attitude and practices of engineering college girls in Nagpur district of central India. National Journal of Community Medicine 2012;3 (1):14-19.

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