# Knowledge, attitude and practices of emergency contraceptive pills (ECPs) among women visiting a tertiary care rural hospital

Neha Kotwal<sup>1,\*</sup>, Anuja Bhalerao<sup>2</sup>

<sup>1</sup>Intern, <sup>2</sup> Associate Professor, Dept. of ObGyn, NKP Salve Institute of Medical Sciences, Nagpur, Maharashtra, India

### \*Corresponding Author:

Email: nehankotwal@gmail.com

#### Abstract

About 13% of pregnancy-related mortality worldwide is due to unsafe abortions. Unwanted births can be detrimental to children's health and well-being. This analysis will help policy makers to have modified and better approaches. There is paucity of data regarding emergency contraception in this part of India. Emergency contraception should be promoted as a 'back-up' method when regular methods are not used, used incorrectly or fail for other reasons. A hospital based cross-sectional study was carried out among 500 randomly selected women in the age group of 18–35 years, through pretested predesigned questionnaire. The answers were analyzed statistically and result was obtained. 27% women had heard of emergency contraceptive pills (ECP). 13.2% knew about the details of consumption. 24% of those who had heard of it gave brand names to the pills. 13.2% women had basic information about emergency contraception. Women had an unfavorable attitude towards ECPs. 80% women had fear of side effects. 92% said doctor's consent is essential before consuming ECPs. Use of ECPs was chosen by 21.42% women. 12% reported a previous history of having used an ECP. Major source of information was television and radio (88%). Only 56% women reported use of any kind if contraceptive method. IUCDs were the method of choice for most women. The knowledge of ECPs is poor, attitude unfavorable, only few practiced the use of ECPs. There is need of awareness campaigns, greater availability and easy access.

Keywords: Attitude, Emergency Contraception (EC), Emergency Contraceptive Pills (ECPs), Knowledge, Practice.

#### Introduction

Each year, about 210 million women around the world become pregnant. Among them, about 75 million pregnancies (36%) are unplanned and/or unwanted. Many of the unintended pregnancies go for abortions. Averagely, 46 million abortions take place every year, out of which 20 million are performed under unsafe conditions. Approximately 13% of pregnancy-related mortality worldwide is due to unsafe abortions. (1) Also unwanted births can be detrimental to children's health and well-being. Reasons for such huge numbers of unintended pregnancies include: a low rate of contraceptive use, method failure, and high unmet need for contraceptives. Each year worldwide, more than 20 million women experience ill health as a result of pregnancy. There are various methods of contraception that include sub-dermal implants, copper-T and other IUCDs, pills etc.

Emergency contraception (EC) refers to a group of contraceptive modalities that when used after unprotected sexual intercourse within defined time limits will markedly reduce the risk of a resulting unwanted, unintended pregnancy. They include hormonal contraceptive pills (also called morning-after pills), intrauterine contraceptive devices and Mifepristone. In India studies with emergency contraceptives with respect to both providers and users are limited. Providers should broadly identify women for whom Emergency Contraception is appropriate.

It should be emphasized that Emergency Contraception is not as effective as regular use of contraception and undesirable effects are more common

after Emergency Contraception than regular contraception. Therefore, Emergency Contraception should be promoted as a 'back-up' method when regular methods are not used, used incorrectly or fail for other reasons. India with high unmet need for contraception unintended pregnancy the reproductive health of young adults. Many studies conducted worldwide show a poor knowledge of women about EC which prevents them from seeking timely help and intervention when such a need arises.

There is paucity of data regarding EC in this part of India. In view of above, a survey was carried out to determine the knowledge, attitude and practice of EC among young women. The analyses of situation will help policy makers to have modified and better approaches.

#### Material and Methods

This was a hospital based, cross sectional study carried out at a tertiary care rural hospital. 500 randomly selected patients visiting Family Planning Clinic of a rural tertiary care hospital, in the age group of 18-35years were included.

#### **Inclusion Criteria:**

- 1. All women visiting the obstetrics & gynecology OPD during the period of study.
- 2. All women in the age-group of 18-35 years.

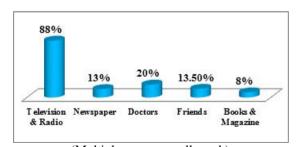
#### **Exclusion Criteria:**

- 1. All women who did not consent for the study.
- 2. Women below the age of 18 years and above the age of 35 years.

After getting the institute ethical committee approval, 500 women (in the age group of 18 to 35 years) were selected randomly. After their consent was obtained, a pre-designed, pre-tested questionnaire was provided to them. They were then informed of the survey, its objectives and procedures, and assured that the information collected would be treated as confidential and used only for research purposes. The answers were used to assess the knowledge, attitude and practice of emergency contraception. Conclusion was drawn by statistical comparison. These women were briefed about advantages and disadvantages of ECPs. The obtained data was analyzed by SPSS software and tests of significance were applied.

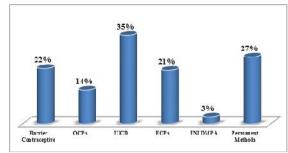
#### Result

The aim of this study was to assess the knowledge, attitude and practice of the women visiting a tertiary care rural hospital. Other objectives being, generation of awareness regarding ECs and improving maternal health by helping towards avoiding unwanted pregnancies and unsafe abortions. A major group of women belonged to the age group of 21-25 years and they had poor knowledge about ECPs. Their attitude towards the use of ECPs was also found to be unfavorable. A major group of women was para-1 and they had poor knowledge with unfavorable attitude towards emergency contraception. Education played a role in determining the level of knowledge; however, attitude was not much affected by the level of education. women belonged to Most socioeconomic strata. The study revealed average knowledge about methods of contraception. About 27% women had heard of ECPs but only 13.2% knew about the details of consumption and mere 24% of the total knew brand names to the pills. The major source of information was television and radio; however, better authenticity was obtained when information was from medical personnel (Fig. 1)



(Multiple responses allowed.) **Fig. 1: Source of Knowledge** 

The attitude in general was unfavorable. 80% of the women had fear of side effects. 92% of women thought doctor's consent was essential before taking ECPs. Only 56% women reported use of contraceptives in any form (Fig. 2).



(Multiple responses allowed.)

Fig. 2: Choice of contraception among participants

IUCD was the most chosen contraceptive which accounted for 35%. Temporary barrier contraception by males was chosen by 22% women. The use of ECPs was chosen by 21% women while only 12% reported a previous use of ECP. No failures were seen. 80% of the women had fear of side effects and 92% thought it was essential to consult a medical practitioner before consuming ECPs. It was concluded that the knowledge about ECPs is poor, attitude is unfavorable and only few actually practice the use of ECPs. 2 cases of pill taken after 72 hrs were reported. (Table 1)

Table 1: Time between exposure and pill consumption among the 12% ECP users

| Duration between exposure and pill consumption | Number<br>of women | Percentage |
|--|--------------------|------------|
| 0-8 hours                                      | 4                  | 7%         |
| 8-12 hours                                     | 10                 | 17%        |
| 12-24 hours                                    | 24                 | 40%        |
| 24-48 hours                                    | 15                 | 25%        |
| 48-72 hours                                    | 5                  | 8%         |
| >72 hours                                      | 2                  | 3%         |

#### Discussion

The research conducted among the women visiting a tertiary care hospital revealed that the general knowledge among women about ECPs was 27% i.e. these women had heard of ECPs, greatly lower than research conducted in an engineering college at Nagpur<sup>(2)</sup> (92.7%). The results of Rural Haryana survey<sup>(3)</sup> showed 16.4% knowledge among eligible couples. A similar research in Bijapur<sup>(4)</sup> showed mere 22.7% knowledge. A research on medical professionals in Bhopal<sup>(5)</sup> also showed poor knowledge about emergency contraception. The result is slightly higher in student survey in Uganda<sup>(6)</sup> (48.4%). A research in Haramaya University also showed 47.6% knowledge.<sup>(7)</sup> A South African survey revealed 30% knowledge prevalence.<sup>(8)</sup>

However, only 24% knew proper brand names to them. And only 66 of them i.e. 13.2% knew the exact details about consumption. Similar was the case in Haramaya University, (7) where only 25.7% students knew about the proper time of consumption.

Surprisingly, only 4% women in Bijapur<sup>(4)</sup> research had complete knowledge. The South African<sup>(8)</sup> research showed that mere 15% knew the brand names to emergency contraceptive pills.

The varying results are a probable effect of demographic variations in the surveys, as proven by the research conducted in Western Cape province of South Africa. (8) It also states that, use of ECPs is more frequent among women from the higher socioeconomic strata. The major source of information was television and radio about 88.88% in our study, the survey in Nagpur<sup>(2)</sup> revealed 65% information from this source. Bijapur research<sup>(4)</sup> shows only 15.3% contribution from this source, while in the research conducted in Uganda, mass media accounts to 17.4%.

Our study revealed 20% contribution from medical personnel, resembling the Bijapur study<sup>(4)</sup> (17.6%), while, according to the study from Uganda, <sup>(6)</sup> health personnel contribute 28.8% and a heavy contribution by peer group was seen accounting to 40%, which is just 13.5% in our study. However, the authenticity and correctness of information from medical professionals was found to be more.

The practice of any form of contraceptives was found to be 56% in the research, unlike 24% in Uganda<sup>(6)</sup> and 95% in Rural Haryana<sup>(3)</sup> (72% males and 46% females). Of these 56% women, selection of ECPs was found to be a method of contraception for 60 women (21.42%) in our study, which was much less than 65.5% found in the research conducted in Uganda; (6) temporary contraceptives accounted for 51.78% of all practices as far as our research was concerned, a KAP study by Srivastava et al<sup>(9)</sup> shows 34.5% women chose their use. Our survey showed individual contribution of Barrier Contraceptives 42.75%, OCPs 13.57%; injectables 2.85%; IUCDs 35.36% which was more than the survey by Srivastava se al, (9) where all these together account for only 20.3%; however, it shows a massive 82.6% women who chose permanent methods over others in contrast to only 26.78% women in our survey.

In the current survey, 12% women had a history of having used ECPs more than Nagpur survey, (2) which showed 5.7% women used ECPs, a little less than Uganda (6) (14.8%), greatly lower as compared to results from Sikkim (10) where 74% reported ECP use. No women who used ECPs reported side effects like nausea vomiting or headache, whereas, 16.6% reported similar complaints in Nagpur research. (2) 66.67% of those who used ECPs said, it was their own decision and other 33.33% stated that it was taken on prescription. No failure was reported in our study.

Therefore, the knowledge and practice of emergency contraception is low. There is a need to raise awareness about it. Most of the women showed unfavorable attitude towards ECPs. 80% of the group had fear of side effects, more than the Nagpur research<sup>(2)</sup> among young girls (63.3%) in contrast to

Uganda<sup>(6)</sup> where most women showed positive attitude towards ECPs. Similar was the picture in Haramaya University,<sup>(7)</sup> where 76.5% women showed favorable attitude towards ECPs. The research in rural Haryana<sup>(3)</sup> also showed a favorable attitude. Most of them (92%) believed doctor's consent is essential before consuming ECPs.

One of the limitations of the study was that, it included a group of 500 randomly selected women visiting a tertiary care hospital only in the age group of 18-35yrs, not essentially from Gondia. Hence, it may not represent the picture in Gondia city entirely.

The strength of our study lies in the fact that most women were young and newly married and hence play a catalytic role in generating awareness about contraceptives and their need.

This study reveals poor knowledge of emergency contraceptives among women. Age, parity education or socioeconomic status had no correlation with knowledge. They were found to be prejudiced regarding the use of ECPs and thought it is unsafe. It was concluded that the knowledge about ECPs is poor, attitude was unfavorable and only few actually practice the use of ECPs.

#### Conclusion

The ill effects of unwanted pregnancies and unsafe abortions are to be stressed. ECPs are used by few handful women. There is a prevalent fear of side effects. There is a need to educate women collectively through health facilities, media, government and nongovernmental organizations with emphasis on available methods and correct timing of use. There is a dire need of conducting regular training and awareness programs for general practitioners and rural health workers about the importance of emergency contraception in order to percolate the same knowledge in the masses as a whole. It would improve the impact of government programs as it is the first level of contact with healthcare for rural masses. Women should be given information about ECPs at every visit to the health services to motivate them. The provision of better quality service with client friendly approach will improve the acceptability of EC services. These measures will help to create awareness and better utilization of ECPs, thus preventing morbidity and mortality from unwanted pregnancies and child birth.

## Acknowledgement

The research was funded by 'Avishkar research convention' run under Hon' Governor, State of Maharashtra. I would like to thank student welfare department, MUHS and my mentor teachers Dr Anuja Bhalerao, Dr Alka Patankar and Dr Manisha Kothekar. I would also like to thank Dr Kajal Mitra, Dean, NKPSIMS Nagpur as well as the MET research cell NKPSIMS Nagpur.

## References

- Adhikari R. Factors affecting awareness of Emergency Contraception among college students in Kathmandu, Nepal. BMC Women's Health 2009;9-27.
- Relwani N, Saoji A, Kasturwar NB, Nayse J, Junaid M, Dhatrak P. Emergency Contraception: KAP study of engineering college girls in Nagpur District of Central India from National Journal of Community Medicine 2012;3:14-18.
- Saluja N, Sharma S, Choudhary S, Gaur D, Pandey S. contraceptive knowledge, attitude and practice among Eligible Couples of Rural Haryana. The Internet Journal of Health 2011;12(1):156e.
- Biradar SM. A survey of knowledge and perceptions towards emergency contraceptives among women of Bijapur, South India. Int J Pharm Bio Sci 2013;4(1):583-87.
- Bhadra S, Tiwari SC, Nandeshwar S, Kakkar R. KAP on emergency contraception among medical and general community of Bhopal City. Indian Journal of Community Medicine 2005;30 (4):10–12.
- Asinja Kapuru Eriab. Knowledge, Use and Attitudes towards emergency contraception among female students of teacher's colleges in Mid-Western Uganda, A dissertation submitted to the school of graduate studies in partial fulfillment of the award of a masters degree of medicine in obstetrics and gynecology of Makerere University August 2008.
- Berhanu Desta, Nigatu Regassa. On emergency contraception among female students of Haramaya University, ethiopia: Surveying the level of knowledge and attitude. Educational research 2011;2(4):1106-1117.
- Landon Myer, Regina Mlobeli, Di Cooper, Jennifer Smit, Chelsea Morroni. Knowledge and use of emergency contraception among women in the Western Cape province of South Africa:a cross-sectional study. BMC Women's Health 2007;7(14):6874-7-14.
- Srivastava Reena, Srivastava Dhirendra Kumar, Jina Radha, Srivastava Kumkum, Sharma Neela, Saha Sushmita. Contraceptive knowledge attitude and practice (KAP) survey. J Obstet Gynecol India 2005;55 (6):546-550.
- Hafizpur Rahaman, Prachi Renjhen, Ashwini Kumar, Sanjay Pallanshetty, Afrin Sagir, Himanshu Dubey. A study on emergency contraceptive practice among nursing staff in Sikkim, India-a cross sectional study. Australian Medical Journal AMJ, 2010;3(10):667-671.