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Original Article

Emergency contraception: Knowledge and practice among women and the spouses seeking termination of pregnancy

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ABSTRACT

Background: India was one of the first countries to launch a formal family planning program. Initially, the main thrust of the program was on sterilization but subsequently it has got evolved and now the stress is to bring about awareness of contraception and make informed choices. Emergency contraception has been included in its armamentarium. This study was conducted to find out about the awareness among the cases who report for induced abortion. **Methods:** A total of 784 willing cases were enrolled in the study; there were no exclusion criteria except unwillingness. A parallel group was also included consisting of their spouses. Information that was being sought about Emergency Contraception (EC) included its knowledge, details of administration, and availability. **Results:** Of the 784 cases, a large number, 742 (94.6%), underwent first trimester abortion and only 42 (5.3%) underwent second trimester abortion. 286 (36.4%) patients had not used any contraceptive. A large number had used natural methods (35.3%), like lactation, abstinence, or coitus interruptus, and 25.7% had used barrier contraception inconsistently. A very small percentage in both the groups knew about EC; more number of men knew about EC than women. **Conclusion:** Awareness about emergency contraception is low, as reported in many other studies, though it is available for many years. Awareness about contraceptives needs to be improved and emergency contraceptive should be advocated as a backup method. More efforts are required to generate awareness about regular use of effective contraception and emergency contraception if required.

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Introduction

India was one of the first countries to launch a formal family planning program.¹ In the beginning, the primary aim of this

program was control of population and the main thrust was on sterilization. This program has evolved over the years, and at present, more stress is being laid on temporary than permanent methods. Conventionally, contraception is used before or during sexual intercourse to prevent conception.

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There are occasions when pregnancy needs to be prevented after sexual intercourse, which was unprotected or prevention was not satisfactory like slippage, tearing of condom, failure of abstinence, or coitus interruptus. Contraception used after intercourse is defined as 'Emergency Contraception' (EC), appropriately called postcoital contraception; earlier it was known as 'The Morning after Pill'.

The first drug to be used as emergency contraception was high dose estrogens in the form of diethylstilbestrol for five days; this regimen had a lot of side effects like severe nausea and vomiting and was replaced by a combination of estrogen and progestin, Yuzpe regimen.² Thereafter, progestin alone in the form of Levonorgestrel³ became popular. Levonorgestrel was approved by Drug Controller General of India as EC in 2001, and it has been introduced in family welfare programs, and is available over the counter since 2003. Levonorgestrel regimen for emergency contraception consists of two doses of 0.75 mg of levonorgestrel taken 12 hours apart starting within 72 hours after unprotected intercourse. 1.5 mg of the drug as a single dose is as effective as two doses. Other drugs, which have been used, are mifepristone, danazol, and copper-bearing intrauterine device. Mechanism of action of various EC regimens is poorly understood, either they make the endometrial cavity unfavorable for implantation or interfere with ovulation. Hormonal emergency contraception⁴ (Yuzpe or levonorgestrel) prevents about 75% of unintended pregnancies after unprotected intercourse or accidental contraceptive method failure.

A large number of unplanned and unwanted pregnancies occur due to lack or failure of contraception, which end up in many induced abortions.⁵ India had made the abortion legal in the form of Medical Termination of Pregnancy (MTP) Act in 1971. Abortions in India can be performed liberally on many grounds, yet unsafe abortions remain the leading cause of maternal mortality and morbidity. If contraception had been used regularly or as an emergency, many of such pregnancies could have been avoided, thereby reducing a great number of legal and illegal abortions. EC is a relatively new concept and is not put to practice probably due to lack of correct knowledge.⁶ Any method of family planning will become acceptable and put into practice only after public has become well informed and aware of that method and is convinced about its efficacy, safety, and absence of side effects. This study was conducted to find out the knowledge of EC among couples who had reported for induced abortion.

Materials and methods

This observational study was undertaken in one of the service hospitals over a period of three years from 2012 to 2014. The aim of the study was to find out knowledge and awareness about EC among the patients who had reported for medical termination of pregnancy (MTP). A total of 784 willing cases were enrolled in the study, and there were no exclusion criteria except unwillingness. Confidentiality was maintained. A parallel group was also included, which consisted of the husbands of these cases if they were available for the study and willing; 413 spouses were included in the study. A structured pro forma was prepared, which consisted of three parts; first part was normal demographic data, second part

was about the contraception being practiced if any before the index pregnancy, and third part was about knowledge of EC. Information about EC included its knowledge, details of administration, and availability. The spouses had to give information about third part only. Respondents (both groups) who had not known about EC were asked if some method were available at the time of contraceptive failure or unprotected sex, then would they have used that method. The data were collected, analyzed, and compared with data available in literature.

Results

This study was conducted over three years. 784 cases were willing for the study and 39 cases did not want to become part of the study. The age groups and parity are shown in [Tables 1 and 2](#). The age varied from 17 to 36 years. There were 4 cases of unmarried girls whose age was less than 18 years. 23 (2.9%) cases were nulliparous, 312 were (38.3%) primiparous, and 449 (57.2%) were multiparous. Of the 784 cases, a large number, 742 (94.6%), underwent first trimester abortion and only 42 (5.3%) underwent second trimester abortion. The causes of unwanted pregnancy resulting in abortion were looked into, if any contraceptive was used or not ([Table 3](#)), and if used, was there any failure of contraceptive. 286 (36.4%) women had not used any contraceptive. A large number had used natural methods (35.3%), like lactational, abstinence, or coitus interruptus. 25.7% had used barrier contraception (male condom). Regarding male barrier contraceptive, the use was erratic and 132 (more than half of users) cases mentioned about partial use, slippage, spillage, or tearing of condom. A small percentage was on oral contraceptive but use was inconsistent. One case had failure of sterilization and had conceived after undergoing tubectomy one year back and had reported for termination of pregnancy. All the cases and the spouses (413) were enquired about their knowledge of EC; the details about their knowledge are depicted in [Table 4](#). A very small percentage in both the groups knew about EC; more number of men than women knew about EC. A large number in both the groups (589 women and 387 men) agreed that they would have used it if it was known to them and was freely available. 9 in group 1 and 11 in

Table 1 – Age profile of 784 cases.

Age group	Frequency	Percentage
15–20	21	2.6
20–25	337	42.9
25–30	412	52.5
>30	14	1.7

Table 2 – Parity of the study group.

Parity	Number	Percentage
Nulliparous	23	2.9
Primiparous	312	38.3
Third para	427	56.0
Fourth para	21	2.5
Fifth para	01	0.16

Table 3 – Contraception prior to index pregnancy.

Contraception	Number	Percentage
No contraception	286	36.4
Natural methods	277	35.3
Barrier	202	25.7
Oral pills	18	2.2
Sterilization	1	0.1
Total	784	100.0

Table 4 – Knowledge about EC.

Parameter	Abortion cases	Spouses
Number of total respondents	784	413
Heard about EC	57	64
Knowledge about details of administration of EC	2	13
Would have used it if it was available? (yes/may be)	589	387
Used in the past	9	11

group 2 admitted to have used EC in the past; whether this was used in normal marital relations or otherwise was not known.

Discussion

WHO has defined Family Planning as “A way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of family groups and thus contribute effectively to the social development of a country.”⁷ Any method of family planning would become acceptable by public and put to practice only after adequate and correct knowledge is imparted to public. The study was conducted to find out about awareness of EC among the patients who reported for abortion and their spouses. Though EC has been available in the armamentarium of contraceptive choices for quite some time, yet its awareness in public has not been satisfactory. Only 7.2% of patients and 15.1% of males knew about EC in this study. Other studies⁸ too have reported that awareness and use of EC is more in males as compared to females. It could be that males are open to talk about sex than females and it is considered acceptable for them to be sexually active outside marriage, which is not the case for females in most of the societies.

Awareness about contraception is high but about EC it is low, as reported by Arora et al.⁹; in their study, only 5.9% of respondents knew about EC. They mentioned that correct use of EC could have prevented nearly 65.5% of induced abortions due to contraceptive method failure and 25.6% of all induced abortions. Awareness about EC was poor as reported in other studies also.^{7,10,11} Even if some persons know about EC, the knowledge regarding the correct timing and usage is poor, as reported in the study done among educated females in New Delhi.¹² Not only clients, even health care providers do not have adequate and correct information, as reported in some studies.^{13–16} If EC is used correctly and regularly, a large number of unwanted pregnancies after unprotected intercourse can be prevented. It is more valid in situations of

contraceptive failure. Contraceptive method failure led to unintended pregnancy in 39% of abortion seekers; knowledge and correct use of EC could have prevented two-thirds of induced abortions.¹⁷

Discovery of EC was a big milestone in the history of contraception wherein a measure could be taken even after unprotected sexual act. It is a perfect backup procedure, but its understanding and use is complex and difficult to comprehend. Hence there is a need to bring about awareness of its uses and advantages. It must be known to all that it is not a birth control pill. It should also be stressed that this is an emergency contraception and cannot take the place of regular contraception. This contraception has almost no side effects. Contraceptives especially like barrier contraceptive should always be advocated with message and education about EC, as a large number of unwanted pregnancies occur with failure of condom.^{18,19} A statutory advice about use of emergency contraceptive in case of an accident should be printed on the cover of condoms. Awareness about contraceptive needs to be improved and emergency contraception should be advocated as a backup method.

Emergency contraception can indirectly increase the chances of HIV and other STDs transmission in extramarital and premarital relations as barrier contraceptive is dispensed with and EC is relied upon after unprotected intercourse. This kind of knowledge is more important for the youngsters like college and school students who are more prone to casual sex. All measures and efforts should be taken on providing health education regarding EC to youth and young adults, especially in schools and colleges, with special emphasis on available methods, correct use, and the availability. At times, awareness of emergency contraception may be there in young people, but the attitude and practice are poor. Inclusion of reproductive health education as part of the school curriculum might help to change the attitude.²⁰

Couples should be encouraged to use regular and emergency contraceptive to reduce induced abortions, both legal and illegal.²¹ This can be achieved by providing information about the available contraceptive methods and helping couples to choose what suits them. Lack of knowledge is the biggest hurdle in practice of EC. After the EC was made available²² as over the counter medicine without prescription for females 16 years and above, the records of two emergency departments in the south East Thames region showed a 52% reduction in the number of female patients attending these emergency departments with requests for emergency contraception. This was possible only after the awareness improved about EC by education.

Conflicts of interest

The author has none to declare.

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