

## Understanding of Emergency Contraception among Health Workers in a Government Hospital in Dehradun

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### ABSTRACT

*Emergency contraception (EC), as the word suggests, offers women of reproductive age an alternative to prevent unwanted pregnancy following unprotected sexual intercourse. Health workers are basic health-service providers and health-educators, as well as important members of the community in which they serve. Their basic understanding about emergency contraception can influence the contraceptive behavior of the community, especially women of reproductive age. Adequate knowledge about different emergency contraception options among health workers will help improve the acceptance these options receive among the residents of the community. Objective – The primary objective of this survey cam study is to find out the understanding of emergency contraception among health workers offering their services in a government hospital in Dehradun. Rationale – Health workers, including nursing staff, ANM, ASHA workers, and Swastha Mitra, with complete knowledge and clear understanding toward EC can act as effective counselors and educators to the members of the community, especially the female population of reproductive age. Setting and Design – This study is a descriptive cross-sectional study. The proposed study was executed in a government hospital in Dehradun, situated in Premnagar, which has a semi-urban catchment area. Study Description & Analysis Method – A pre-designed questionnaire was utilized to assess the understanding of emergency contraception among health workers. To understand how much the health*

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*workers knew about other options of emergency contraception and to verify that the information filled by them in the questionnaire matched their understanding of the subject, the health workers were interviewed after filling the questionnaire. The statistical method applied for this data collection and data analysis was done by using Mean & Percentages.*

**Keywords:** *Emergency Contraception, Health Workers, Health Education*

## INTRODUCTION

This study is about emergency contraception. Emergency contraception can be described as the intervention utilized to prevent unwanted pregnancy following unprotected sexual intercourse. These are recommended for use within five days, but are more effective the sooner they are implemented following unprotected sexual encounters.

Each year approximately 214 million women become pregnant worldwide; out of these, around 80 million pregnancies are unplanned, and mostly occur due to failure of contraceptive methods or negligence. Approximately 46 million (22%) end in induced abortion and 68,000 women die each year because of unsafe abortion methods resulting in several complications.

### Indian Perspective

Complications from unsafe abortion account for an estimated 9% of all maternal morbidity in India. Emergency Contraception (EC) promises to be a very effective tool in preventing unwanted pregnancies as it is a very safe and extremely effective method. with a failure rate of only 0.2-3%. Although EC was introduced in the National Program in 2003 in India and later declared as an over-the-counter (OTC) product in 2005, it still remains a grossly under-utilized option in achieving the goal of preventing unwanted pregnancy.

Health workers act as both health educators and healthcare service providers. Their understanding about contraception can grossly influence the contraceptive practices of the community. Therefore, this study has been envisioned to understand and assess the level of knowledge, attitude, and practice of EC among health workers serving in a government hospital in Dehradun. Women, especially of reproductive age, living in the catchment area of the hospital interact with health workers quite often; they know the healthcare workers very well and contact them in case of any of their primary healthcare-related need. Hence health workers can

be a good source to educate and influence their knowledge and attitude toward EC.

## **Global Perspective**

Although emergency contraceptive pills (ECPs) are now available in most countries across the globe, they have failed to produce a significant impact on checking unwanted pregnancy rates around the world. Researchers and academicians working on this topic have thoroughly researched and discussed this topic, and figured out some obvious causes resulting in the under-utilization of EC for preventing unwanted pregnancies.

The understanding of post-coital contraceptive methods is still relatively unknown in many countries, according to data from Demographic and Health surveys and other country-level surveys.

A 2007 survey of adolescents in New York City schools observed that less than half of the young people had heard about emergency contraceptive pills, despite extensive public outreach and media awareness surrounding their over-the-counter status in the United States of America (USA). Even in the United Kingdom of Great Britain and Northern Ireland, although 91% of women had heard of the “morning-after pill”, only 7% had used it in the past year.

Another reason for the low level of adaptation of ECPs by young people is poor basic understanding of fertility, contraception, and pregnancy risk that seems widespread in both developed and developing countries. In France, a survey of women seeking abortion indicated that more than half were unaware of their pregnancy risk at the time of engaging in unprotected sexual acts; only a minority of women were aware of using emergency contraceptive pills.

In the United Kingdom, a study of abortion and pre-natal care clients showed that emergency contraceptive pills were used by only one in ten women who definitely did not wish to become pregnant, and even fewer used the method every time they were at risk of pregnancy.

Unfortunately, the already substantial misinformation that women have about pregnancy risk and emergency contraceptive pills (along with other contraceptive methods) is being compounded by recent media coverage. Some media reports intentionally/unintentionally have propagated myths about side effects of EC such as persistent nausea, vomiting, heavy bleeding, and so on. These media statements are scientifically incorrect, but such negative and sometimes inflammatory media coverage alarm women and may keep some from using the method when they most need it.

Indeed, media and public health can be a volatile mix. The potential association between childhood vaccination and autism proposed in one article in the *Lancet* in 1998 (and officially retracted in 2010) was picked up by media around the world, and led to resistance to vaccination; it took millions, which were spent on studies, and many years of research, to refute the claim spread by the incorrect media reports.

In today's present scenario, the Internet can quickly spread and run media stories as breaking news, and it is immediately made viral on social media, and resulting in creating a Chinese whisper phenomenon. An e-mail circulating for several years previously describes the "true story" of a woman who died of a stroke while on hormonal birth control; the story was recently morphed and now claims that "the cause of death – continuously taking the morning-after pill". The fear-mongering media coverage around emergency contraceptive pills is likely to be driven by concerns about "irresponsible" sexuality, hiding behind false "scientific" justification for such concerns.

Public health and medical professionals cannot afford to ignore the role of today's social media platform. They spread news all over the Internet. However, proper and accurate media coverage has played an important role in spreading news about health risks, healthy behaviors, and new products in the past.

Countering every health-related rumor on the Internet and inaccurate story in social media and newspaper is surely not a good approach. However, it is important that the scientific fraternity should always be ready with the facts and figures when reporters, community members, and patients raise a concern on this topic. A team of noteworthy global experts and scientists have produced a short, simple statement on the safety of levonorgestrel emergency contraceptive pills, responding directly to articles that appeared in the mainstream media in 2009 and written for non-scientists. This co-production of the World Health Organization, the International Federation of Obstetrics and Gynecology, the International Planned Parenthood Federation, and the International Consortium for Emergency Contraception can be accessed on the WHO website (Ref:<http://www.who.int/bulletin/volumes/88/4/10-077446/en/index.html>).

## **METHODOLOGY**

This survey-cum-study was cross-sectional and conducted in a government hospital set-up in Dehradun to assess the knowledge, attitude, and practice

of emergency contraception among the 120 health workers, including nursing staff, ANM, ASHA workers, and Swastha Mitra, working in the catchment area of the hospital. We interviewed health workers randomly after receiving their voluntary, verbal consent for the study. We also invited them to participate in the study and fill the study questionnaire. A pre-designed, study questionnaire was given to them to collect information on socio-demographic variables, knowledge, attitude, and practice toward emergency contraceptives.

Questions on practice of EC were optional as the study included both married as well as single health workers. Confidentiality of information provided by health workers were assured and maintained as per the basic guidelines of conducting any observational, cross-sectional study. For evaluation of knowledge and attitude, participants had to answer by ticking either ‘Yes’ or, ‘No’. Descriptive analysis using percentages, mean, and standard deviation (SD) was applied for the study result analysis.

## RESULTS

A total of 120 health workers participated in the study. Of these, 85% (i.e. 102 health workers) were married. The mean age was 35.40 ±8.20 years. The mean duration of work experience was 12.08 years. Table 1 depicts the socio-demographic profile of the study participants.

**Table 1: Socio-Demographic Characteristics of Participants**

<i>Characteristics</i>	<i>Number (n=120)</i>	<i>Percent (%)</i>	
Age (yrs.)	20 – 29	19	16
	30 – 39	57	48
	40	44	36
Residence Area	Urban	98	82
	Rural	22	18
Married	102	85	
Unmarried	18	15	
Religion	Hindu	82	68
	Muslim	27	23
	Christian	11	9
Duration of Work Experience (yrs.)	10	58	48
	20	39	33
	20	23	19

Majority of the participants (55%) had at least two children due to unplanned pregnancy. When asked leading questions, 87% health workers felt that unwanted pregnancy is a major problem in our country. All the health workers were aware of some methods of contraception. The use of condoms was the most popular.

The most common source of information about EC was from mass media, social media (100%), followed by doctors (63%; 75/120), and friends, relatives, and spouse (10%; 12/120). Regarding methods that could be used as EC, 85% (102/120) responded in favor of Levonorgestrel (LNG).

**Table 2: Knowledge about Emergency Contraception**

<i>Statement</i>	<i>Correct Response</i>	<i>Incorrect Response</i>
Indication for using EC	84 (70%)	36 (30%)
LNG as EC	82 (68.33%)	38 (31.67%)
High-dose OCP as EC	75(62.5)	45 (37.5%)
IUCD as EC	40 (33.33%)	80 (66.67%)
Mifepristone as EC	24 (20%)	96 (80%)
Mechanism of Action	34 (28.33%)	86 (71.67%)
Appropriate Time for taking LNG	93 (77.5%)	27 (22.5%)
Number of Tablets to be Taken (Two)	86 (71.67%)	34 (28.33%)
Interval for Repeat Dose (12 hours)	86 (71.67%)	34 (28.33%)
LNG is Available as an OTC Drug (Yes)	82 (68.33%)	38 (31.67%)
Common Side Effects	35 (29.17%)	85 (70.83%)
Contraindications to EC (Pregnancy)	24 (20%)	96 (80%)
EC Protects Against STDs (No)	80 (66.67%)	40 (33.33%)
EC can be used Regularly (No)	86 (71.67%)	34 (28.33%)
Effectiveness of EC in Preventing Pregnancy	102 (85%)	18 (15%)

**Table 3: Responses Regarding Attitude toward Emergency Contraception**

<i>Statement</i>	<i>Yes</i>	<i>No</i>
EC is safe for its users	90 (75%)	30 (25%)
Will recommend EC to others	94 (78.33%)	26 (21.67%)
Should paramedical staff dispense EC	24 (20%)	96 (80%)

<i>Statement</i>	<i>Yes</i>	<i>No</i>
Should EC be more widely advertised	65 (54.17%)	55 (45.83%)
Willing to attend awareness program	115 (95.83%)	5 (4.17%)
Using EC is better than abortion	110 (91.67%)	10 (8.3%)
EC will encourage high-risk behavior	30 (25%)	90 (75%)
EC would discourage consistent use of condom	42 (35%)	78 (65%)
Does EC use discourage regular contraceptive use	104 (86.67%)	16 (13.33%)
Purchase of EC as OTC will be embarrassing	70 (58.33%)	50 (41.67%)

All had some knowledge that EC should not be used as a regular method of contraception (Table 2), but at the same time, most of them (80%; 96/120) wrongly opined that contraindications such as hypertension, heart diseases, diabetes mellitus, and thyroid disorders were associated with prolonged use of oral contraceptives such as emergency pills. A majority of them (72%; 86/120) opined incorrectly that EC pills are abortifacients. All the participants had a positive attitude toward EC (Table 3).

## DISCUSSION

Unwanted or unplanned pregnancy poses a major health challenge to women of reproductive age and can be one of the most important causes of maternal mortality in the developing nations around the world. Emergency contraception offers women an alternative option to prevent pregnancy after unprotected sexual engagement. The biggest hurdle in the practice of EC is lack of knowledge and awareness in the community; people in the community are reluctant to speak of this vital personal health topic.

Health workers form a vital component of the current healthcare delivery system and they can play a major role in creating positive awareness regarding EC among community members. The interpersonal skills and devotion of health workers bring them close to the patient, their relatives, and community members. They can play a pivotal role in eradicating the misconceptions and myths surrounding EC to the community members. In the present survey-cum-study, only 28% (34/120) had correct knowledge about EC.

LNG as EC was known to only 69% of our participants. Thirty-three per cent considered IUCD as EC and about 20% considered Mifepristone

as EC. The above data shows that health workers have very inadequate knowledge about EC and its role in preventing unwanted pregnancy.

From a study done in Vietnam previously, it has been observed that healthcare providers who received training and proper information about emergency contraception were able to include EC as an option in their cafeteria approach to the clients seeking contraceptive advice, and they were also able to effectively counsel their clients on the use of EC as an emergency method to prevent unwanted pregnancy following unprotected sexual intercourse. Researchers also noted that health personnel, including pharmacists and chemists, should have proper training regarding the advantages, disadvantages, and side-effects of EC, along with the correct way of using it. During the interview it was noted that health workers have a misconception about EC.

Most of them considered EC as an abortifacient, and during the interview, they also revealed that most of community members also believed that ECs are basically abortifacients. The correct timing of administration of EC was known to 78% (i.e. 93/120) of our respondents. The common side-effects of EC include nausea, vomiting, abdominal pain, breast tenderness, headache, dizziness, and fatigue. These usually do not occur for more than a few days after treatment and they generally subside within 24 hours. Among health workers interviewed during the study, only 29% (35/120) were aware of these side-effects of EC.

The majority of the health workers who participated in the study had a positive attitude toward EC and showed their willingness to encourage their friends and relatives to use EC if necessary. About 59% (i.e. 70/120) felt that purchasing EC from OTC will be embarrassing; however, 91% of the health workers believed that using EC is better than abortion. Ninety-eight per cent of the participants responded affirmatively regarding promotion of EC.

Although having a positive attitude toward EC, the actual percentage of women using it is very low, i.e., EC is an under-utilized option. This indicates that participants had many misconceptions and apprehensions regarding its use. The reason for lack of detailed information about EC may be linked to the percolation of half-information about EC to end-users. The advertisements on television stress only on the accessibility of EC pills but they lack complete information about the product and its proper usage. Hence, it is the healthcare providers who can impart correct,



detailed information to their clients, and this is only possible when they themselves are thorough in their concepts and knowledge on this topic.

## CONCLUSION

Knowledge gaps among the health workers regarding EC needs to be bridged to avoid its negative impact on prescribing habits and future promotion of emergency contraception among community residents. It is therefore absolutely essential and mandatory to impart detailed training about contraception and different contraceptive methods, including EC. Healthcare providers should also be motivated to update and advance their knowledge with recent advancements done in the field so that they can spread the right message to the community members at large. Continuous Medical Educations (CMEs), conferences, seminars, and other innovative tools such as community play and nukadd sabha should be utilized to make community members aware of the importance of family-planning and its benefits. The community members should also be encouraged to contact health workers for all their basic health needs.

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