

Assessment Of Knowledge, Attitude and Practice Towards Emergency Contraception Among Women of Reproductive Age Group Working in Hospital Premises Other Than Health Professional

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Abstract

Aim: Assessment of Knowledge, Attitude and Practice towards Emergency Contraception among women of reproductive age group working in hospital premises other than health professionals. **Methods:** This was a descriptive cross-sectional study conducted in the Department of Obstetrics and Gynecology, All India Institute of Medical Sciences, Patna, Bihar, India. The questionnaire covered the following demographic points like age, age at marriage, address, religion, education, total family income, socioeconomic status, no of living children, no of abortions and its reason, menstrual history. **Results:** 76 of 100 (76%) knew that it should be taken within 72 hours. 40% knew that it can be obtained without prescription and 10% said that it cannot be obtained without prescription and 60% had no idea about it at all. 50% did know about the exact dose. 24% of them had no idea in which conditions are ECPs used. 35% believed that it should not be given to lactating mother and 65% had no idea whether to given to breastfeeding mother or not. No single women found safe to breastfeeding mothers. Only 4% said that they might use it in future if required. When asked whether it should be included in orientation Programme 86 were neutral about it and 4 said no and only 10% of them wanted to know more about ECPs. 70% did not prefer ECPs as they had no clear-cut knowledge of dose and timings and 30% feared of its side effects. 30% said that it should not be available without prescriptions 62% were neutral and 8 told that it should be freely available. **Conclusion:** Awareness among the public through mass media is likely to generate public demand for EC and also needed to be adequately educated and informed about ECPs to make this method successful.

Keywords: Emergency Contraception, Women, Awareness.

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Introduction

Globally, unintended pregnancies resulting in abortions and myriad abortion-related complications is now a major reproductive and public health challenge. This problem affects millions of women worldwide and has been identified as one of the leading causes of maternal morbidities and mortalities. According to World Health Organization (WHO), about 16 million girls aged 15-19 and about one million girls less than 15 years of age give birth every year while about three million girls aged 15-19 undergo unsafe abortion yearly[1]. Moreover, about 75 million of the estimated 180-200 million pregnancies that occur annually in the world are unintended and most of these pregnancies occur in adolescents[2]. On the average 56 million induced abortions occur worldwide each year[3]. Regrettably, an estimated 2.2 million unintended pregnancies occur annually among adolescents in Sub-Saharan Africa and almost 60 percent of unsafe abortions in Africa are among women aged 15-24 years[4]. In a study among in-school adolescents in eight African countries by Peltzer K, not less than 27.3% of the respondents had experienced sexual debut before age of 15 years[5]. In Nigeria, not less than 60% of the 600,000 induced abortions occurring annually are found among adolescents while 250 out of 1000 adolescent pregnancies end in unsafe abortion[6]. Despite the fact that India was the first country in the world to implement a national population control programme in 1952, the country is still struggling to contain the baby boom. A lot of efforts and resources have gone into the National Family Welfare Programme but the returns are not commensurate with the inputs. The programme has targeted eligible couples in its efforts to control the population. The United Nations Fund for Population

Activities (UNFPA) notes that future population trends will hinge on the fertility decisions of today's men and women aged 15-24 years and, on their ability, and freedom to act on those decisions.⁷ Concern about adolescent fertility arises from its health implications both for the mother and the child, its demographic implications in societies with rapid population growth and its social development implications. Because of the young age structure of India's population, the reproductive attitude and behaviour of teenagers are likely to have an important impact on overall reproductive health, demographic and social outcome. Adolescent sex and exposure to the risk of pregnancy has attracted considerable research attention to understand its magnitude and address it as a problem[8].

Globally, adolescent girls are probably the most vulnerable group as they are victims of early marriage, early and frequent childbearing, unsafe abortions all of which lead to high morbidity and mortality (UNAIDS, 2011). In fact, pregnancy complications and sexually transmitted diseases during adolescence can permanently affect the future reproductive capacity of the girls as well as the future of a nation[9].

Statistics done on unplanned pregnancy showed that the rate of unplanned pregnancies varies around the world. The number is particularly high among teenagers and poor sectors of the population, but it is also seen among women age greater than 35, both single and married. His statistics revealed that even though the total number of unplanned pregnancies has decreased over the past few decades, the percentage remains high among teenagers[10] who could be due to gap in awareness, mal attitudes towards

contraception, low accessibility or as a result of sexual assault. At times, the knowledge and practice might be there, but no contraceptive is 100% effective and it is always very crucial to have EC as a backup method.

Material and methods

This was a descriptive cross-sectional study conducted in the Department of Obstetrics and Gynecology, All India Institute of Medical Sciences, Patna, Bihar, India, after taking the approval of the protocol review committee and institutional ethics committee.

Methodology

After taking informed consent detailed history was taken from the patient or relatives. Data was collected using anonymous pretested structured questionnaire. The women were informed and explained about the study and in case of illiterate subjects our nursing staff gave the guidance to fill the questionnaire. The questionnaire covered the following demographic points like age, age at marriage, address, religion, education, total family income, socioeconomic status, no of living children, no of abortions and its reason, menstrual history. Also, information regarding kind of contraceptive method available and used by them at any point of time and their preference were assessed. The respondents were also asked all types of questions which could help us to assess their knowledge attitude practice and acceptability of emergency contraception.

Data analysis

The questionnaires were edited for accuracy, completeness and uniformity then coded. Coding involved the categorization and quantification of data by assigning numerical values to the various categories in order to facilitate the statistical representation of data. The quantified data were then transferred to

Statistical Package of Social sciences (SPSS version 13) computer package for data analysis. A two-tailed significance level was used since the direction of association between variables was not known in advance. Data was analyzed at the 0.05 level of significance.

Results

200 women gave consent for the study. As shown in Table 1, 92% of the respondents were from urban background and apart from Hindu comprising 75% of the population Sikhs were also in significant number i.e., 20%. Only 22.5% were illiterate and 77.5% were educated. We can see that 100% of the females were aware of the modern method of contraception. 100 of 200 i.e., 50% had of Emergency contraceptive pills. 50 of 200 i.e., 25% had ever used ECPs. 15% were always practicing UPSI and 50% were mostly and 35% rarely practicing UPSI. 45% of females had unwanted pregnancy and 35% had undergone induced abortion mostly because of family being completed.

Table 2 assesses the knowledge about ECPs in women who have heard of Emergency contraceptive pills. 76 of 100 (76%) knew that it should be taken within 72 hours. 90% had of it heard through audio-visual media like television and radio and around 4% knew from magazines or their friends and relatives. 77% told that it could be obtained from medical store and 15% said that it can also be obtained from pvt doctors and their clinic. Only 4% knew that it can also be obtained from public health facilities. 40% knew that it can be obtained without prescription and 10% said that it cannot be obtained without prescription and 60% had no idea about it at all. 50% did know about the exact dose. 24% of them had no idea in which conditions are ECPs used. 35% believed that it should not be given to lactating mother and 65% had no idea whether to given to breastfeeding mother or not. No single women found safe to breastfeeding mothers.

Table 3 assesses the attitude towards ECPs. Only 4% females admitted that they will recommend ECPs to other females. Only 4% said that they might use it in future if required. When asked whether it should be included in orientation programme 86 were neutral about it and 4 said no and only 10% of them wanted to know more about ECPs. 70% did not prefer ECPs as they had no clear-cut knowledge of dose and timings and 30% feared of its side effects. 30% said that it should not be available without prescriptions

62% were neutral and 8 told that it should be freely available. 74% of them did not want that it should be easily available to young girls. 46% believed that if made readily available it would encourage promiscuity and sexual irresponsibility and 49% were neutral. Only 38% believed it to be effective and 60% found it to carry major side effects. No single women said yes when asked whether they will recommend or suggest their daughter for ECPs and 82% said No and 18% were neutral. Out of 100 who had heard of ECP's 50 had used it.

Table 1: Socio-demographic characteristic of the married females of reproductive age group

	Number	Percentage
Residence		
Urban	184	92
Rural	16	8
Religion		
Hindu	150	75
Muslim	8	4
Christian	2	1
Sikh	40	20
Education		
Illiterate	45	22.5
Primary	31	15.5
Secondary	46	23
Graduate	60	30
Postgraduate	18	9
Family monthly income		
<5000	70	35
5000-15000	80	40

15000-25000	41	20.5
>25000	9	4.5
Age at marriage		
<20	96	48
20-30	100	50
>30	4	2
No. of children		
≤2	140	70
3-4	58	29
≥4	2	01
Knowledge of various methods		
Any modern method	100	100
Condom	190	95
OCP	192	96
IUD	160	80
Injection /Implant	100	50
Natural	140	70
ECP	100	50
Sterilization	198	99
Type of contraceptive ever used		
Any modern method	121	65.5
Condom	89	44.5
OCP	40	20
IUD	20	10

Table 2: Knowledge of women who ever heard of emergency contraception

Variables	Number=100	Percentage
Source of information		
Formal education	0	0
Media (TV/Radio)	90	90
Magazines	4	4
Internet	0	0
Health personnel/F. doctors/nurses	1	1
Friends/relatives/husband	5	5
Pharmacist	0	0
Gynaecologist	0	0
When ECP can be used		
Just before sex	2	2
Within 24 hours of UPSI	6	6
Within 72 hours of UPSI	76	76
After 72 hours of UPSI	1	1
Don't know	15	15
Since when do u know about ECPs		
6 months	0	0
6-12 months	2	2
1-1/2 years	4	4
½- 5 years	94	94
6-10 years	0	0
Effectiveness of ECP		
75-99%	8	8
50-75%	4	4

30- 50%	5	5
Don't know	83	83
Safety		
Safe	10	10
Unsafe	60	60
Don't know	30	30
Place to obtain ECPs		
Public health facilities	4	4
Pvt doctor/clinics	15	15
Supermarket	1	1
Social Workers	5	5
Pharmacist/medical store	77	77
Don't know	2	2
Which of these can be used for EC		
I Pill/Pill72/Unwanted 72	43	43
IUCD	0	0
OCPS	2	2
Don't Know	55	55
Can u get ECPs without prescription		
No	10	10
Yes	40	40
Don't know	50	50
Adverse effect of ECPs		
Infertility,15thirst, rregular menses	20	20
Heavy bleeding	10	10

Nausea vomiting	10	10
No idea	45	45
Recommended dose of ECPs		
One tablet	10	10
Two tablets	40	40
Don't know	50	50
Interval between 2 doses		
12 hours	21	21
24 hours	22	22
Don't know	57	57
Conditions where EC can be used		
UPSI	21	21
Rupture of condoms	20	20
Post rape	10	10
Forgotten OCPs	10	10
All of the above	15	15
No idea	24	24
Do these pills lead to abortion		
Yes	47	31
No	19	9
Don't know	102	60
DO these pills cause harm if given to B.F. Mothers		
Yes	59	35
No	0	0
Don't know	109	65

Can it be used as regular method of Family Planning		
Yes	3	2
No	67	39
No idea	98	59
How many times in a single cycle can it be used		
Once	51	30
Twice	15	10
Many	0	0
Don't know	102	60

Table 3: Analysis of attitude towards ECPS

Variables	Numbers	Percentage
Will you recommend ECPs to others		
Yes	4	4
No	61	61
Neutral	35	35
Would u use ECPs in future		
Yes	4	4
No	68	68
Neutral	28	28
Should ECPs be included in orientation programme		
Yes	10	10
No	4	4
Neutral	86	86
Reasons for not using ECPs		
Not heard	0	0
No clear-cut knowledge of	70	70

dosage and timing		
Fear about side effects	30	30
Should it freely available without prescription		
Yes	8	8
No	30	30
Neutral	62	62
Should it freely available to girls >18 years		
Yes	0	0
No	74	74
Neutral	26	26
Access to ECPs will encourage promiscuity and sexual irresponsibility		
Yes	46	46
No	5	5
Neutral	49	49
Is it effective?		
Yes	38	38
No	14	14
Neutral	48	48
Available ECPs carry major side effects		
Yes	60	60
No	2	2
Neutral	38	38
Can it be used regularly to avoid pregnancy		
Yes	2	2
No	55	55

Neutral	43	43
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Table 4: Analysis of experience of ECPs of those 50 subjects who had used it

Variables	Number	Percentage
No. of respondents who have used EC		
ECPs	50	25
IUCD	0	0
OCPs	0	0
With whose advice used ECPs?		
Husband	5	10
Friends/relatives	4	8
Health personnel/F. doctors/nurses	8	16
Media (TV/Radio)	11	22
Magazines	0	0
Internet	0	0
Pharmacist	16	32
Social worker	4	8
Gynaecologist	2	4
Why did u use it?		
Was not using any contraception	38	76
Timing was miscalculated	0	0
Condom torn or slipped	6	12
Missed pills	4	8
Don't remember	2	4
Did u have any side effects?		
Nausea vomiting	20	40

Menstrual problem	30	60
Pain abdomen	5	10
No side effects	8	16
Don't remember	7	14
Did u have any menstrual problem after ECPs?		
Yes	30	60
No	12	24
Don't remember	3	6
What type of menstrual problem did u have?		
Delayed periods	6	12
Heavy bleeding	40	80
Spotting	4	8
What type of menstrual problem did u have?		
Delayed periods	6	12
Heavy bleeding	40	80
Spotting	4	8
Did u ever refer to gynaecologists?		
Yes	6	12
No	44	88
How frequently have u used in a year?		
Once	44	88
Twice	3	6
Thrice	3	6
>3	0	0
How many times used in same cycle?		

1	47	94
>1	3	6
Is it effective in preventing unwanted pregnancy?		
Yes	45	90
No	5	10
Have u ever used after 72 hours?		
Yes	3	6
No	47	94
Have you ever advised to other?		
Yes	4	8
No	46	92

Table 5: Some important facts, statistics of India and Chhattisgarh taken from NFHS-3 (2005-2006)

Variables	Current study (%)	Chhattisgarh*** (%)	India*** (%)
Knowledge of any modern method of contraception	100	99.7	99.3
Used any of the modern method of contraception	65	58.9	55.8
On an avg. % of currently married women not using any contraceptive method most of the time	>65	71.3	61.7
Knowledge of ECPs	50	13.5	22.6
Use of ECPs	50	No data	No data

Discussion
Pritam *et al.*

International Journal of Pharmaceutical and Clinical Research

Although India was the first country in the world to introduce a National Family planning Programme as early as during the first five-year plan (1951-1956) to control population explosion[11]. The unmet need for family planning among currently married women is still 13 percent in India. Although in India it is estimated that CPR is 56% only 10% are using spacing methods. Numerous contraceptive techniques both temporary and permanent have been introduced by family welfare department of India[12]. Discontinuation rates for temporary methods are fairly high: 39 percent of users of temporary methods discontinue use within 12 months of initiating use. About half of pill users discontinue use within the first year of adopting the method, and discontinuation is also high for condoms. One-year discontinuation rates are also substantial for users of the rhythm method (32 percent) and withdrawal (35 percent), the methods with the highest failure rates[13]. This leads to exposure to unprotected sex even when not planning for a pregnancy necessitating the use of Emergency Contraception, to avoid the potential hazards of pregnancy termination. This need may also arise due to failure of contraceptive method being used (condom rupture, diaphragm slippage, forgotten oral pills) or following sexual assault. By timely and judicious use of Emergency Contraception (EC), 75-99% of these unplanned pregnancies, and thereby unsafe abortions, can be prevented (Emergency contraception consensus conference, Bellagio, 1998). Prevention of these unplanned pregnancies will go a long way in improving the reproductive health of women in India as failure rate of Emergency Contraception is varying from 0-2.4% depending on the method used interval between coitus and method use and relationship of coitus to ovulation. But all methods are ineffective once implantation has already occurred. While termination of an unwanted pregnancy is legal in India, women living in the state of Chhattisgarh,

where maternal mortality are higher than the Indian average often encounter numerous challenges when trying to access safe abortion services[14]. Not a single study have been done in Chhattisgarh and use of ECPs hence this study apart from evaluating the knowledge attitude experience and acceptance of ECPs and at the same time all the females who were not aware or did not have specific knowledge about various modern method of contraception were made aware and counselled positively regarding indications, effectiveness, safety, side effects, dose, dosing interval, cost, availability etc. so that they develop positive attitude towards ECPs and freely practice in their daily life.

The one-year discontinuation rates for all spacing methods are highest in Jharkhand, Kerala, Tripura, and Madhya Pradesh, Chhattisgarh (49-52 percent). The table below summarizes some important facts, statistics of India and Chhattisgarh taken from NFHS-3 (2005-2006)[15,16].

The current study reflects that although 50% women have heard of ECPs, the detailed and specific knowledge of ECPs are poor and misinformation is high. This was because main source of information was through electronic media or informal network such as friends and family members which are unreliable and gives limited information regarding effectiveness, safety dose, dosing interval, adverse effects, place to obtain, indications where it can be used etc. Surprisingly even the health personnel and medical staff are not aware that department of health and family welfare is responsible for implementation of national family welfare programme encourages the utilization of contraceptive and distributing the same to the state/union territory, through free supply scheme and Public Partner Partnership (PPP) under Social marketing scheme and about 21.5 lakhs pack of two tablet each of E-pills were procured during the year 2010-2011 and supplied freely to

the state and about budget of 1.72 crores has been utilized for that.¹⁷ None of the females had a strongly positive attitude for ECPs and most of them did not favour its availability as an OTC may be because they thought it might be misused by younger generation and would encourage unsafe sexual relationship and believed that availability with prescription would rather be more effective contraception. Parents and society do not feel comfortable discussing sexuality and reproductive health matters with their daughters thinking it would divert and misguide them. However, the level of usage does not match the level of awareness due to lack of concrete knowledge of this method. EC is rarely prescribed in India. Only 30–40% of general practitioners and 10% of paramedical staff are aware of it. Detailed knowledge about EC among practising gynecologists is also limited.¹⁸⁻²¹ Two recently conducted national surveys on contraception did not include any questions about EC, suggesting a lack of recognition of its potential use even by policymakers[22]. Inclusion of EC in the family planning programme could have a substantial impact on reducing the rate of induced abortion. Using a 75% efficacy rate for EC[23-26], it is estimated that the correct use of EC could have prevented nearly 65.5% (95% CI 57.0-74.0) of induced abortions due to contraceptive method failure and 25.6% (95% CI 20.7-30.5) of all induced abortions[27]. Many researchers have concluded that expanded access does not increase the rate of unprotected sexual intercourse nor does it change sexual behaviours[28,29]. All these disbeliefs lead to directly obtain it from pharmacy than to consult health personnel so as to maintain privacy leading to failure and ending into unsafe abortion specially in young unmarried females.

Awareness of EC is poor even among the general practitioners and specialist doctors and young interns are aware of EC, but they lack an accurate and detailed knowledge

Pritam et al.

regarding its composition, dosage schedule and efficacy. Patients rarely seek help in cases of condom failure and unprotected intercourse. Very few doctors prescribe EC and counsel patients for contraceptive failure.

Those women who had used ECPs mostly took the advice of all others except gynaecologists and 60% had some kind of menstrual problem and as high as 90% females were satisfied and found effective in preventing unwanted pregnancy and only 4% had to visit gynaecologists for some side effects but still as high as 92% did not suggest other females for its use.

Conclusion

Awareness among the public through mass media is likely to generate public demand for EC and also needed to be adequately educated and informed about ECPs to make this method successful. OTC supply of ECPs without prescription but with pharmacist counselling may increase reduction of unintended pregnancy and abortion. However, keeping in mind the changing sexual behaviour of the younger generation, a formal training of the doctors and paramedical staff and preparing guidelines on EC use would be a right step. Prescription practices can be improved by generating education and training of health care providers and it should be a routine practice to discuss about EC with couples seeking contraceptive advice by increasing access to client friendly EC services through all major sectors of service provision in line with awareness creation and incorporation of RH programs and educational campaigns at schools, youth.

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