

Knowledge, Attitude and Practice of Emergency Contraception on Nursing Personnel

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ABSTRACT

Introduction: Emergency Contraception is a grossly underutilized option of prevention of pregnancy. It is a safe and effective method which can prevent unintended pregnancies, unsafe abortions and unwanted childbirth. Knowledge and attitude of Nursing personnel who are both service providers and health educators to the community can influence the contraceptive behavior of the people exposed to them. A few studies done in our country indicate that their awareness regarding EC is low.

Aim: To explore the knowledge, attitude and practice of EC amongst Nursing Personnel in a medical college hospital.

Materials and Methods: In this study, 185 nursing personnel participated. A predesigned, pretested questionnaire was used to collect their responses regarding knowledge, attitude and practice of EC. Descriptive analysis of data was done.

Results : Out of the total, 52.43% of the participants had good knowledge regarding the general information of EC, 51.35% had positive attitude towards EC, 47.56% had expressed willingness to use EC if indicated whereas only 22.7% had ever used EC. 72.97% had expressed willingness to attend awareness programmes on EC.

Conclusion : Even though knowledge and attitude towards EC among the participants was marginally good they had many misconceptions regarding specific aspects like mode of action, indications and timing of administration. More awareness programmes would definitely clear their misconceptions and apprehensions and encourage Nursing Personnel to personally use and promote EC to others.

Keywords: Attitude, Emergency Contraception, Knowledge, Nursing personnel, Practice

INTRODUCTION

The incidence of induced abortions in India is 6, 20, 472 and maternal mortality due to unsafe abortions is 8% [1]. Most of these induced abortions are due to unwanted pregnancies. Practice of contraception is pivotal in reducing the incidence of abortions but the estimated couple protection rate is only 40.4% [1].

Emergency Contraception (EC) is a safe and extremely effective method which was introduced three decades ago as a means to reduce the rates of unintended pregnancies, induced abortions, and unwanted childbirth. In spite of being introduced in the National Family Welfare Programme in 2003 and later declared as an OTC product in 2005 it still remains a grossly underutilized option in the prevention of pregnancy.

The popular methods approved by the Government are the Yuzpe regimen which contains 100 mcg of Ethinyl estradiol and 1 mg of norgesterol taken 12 h apart and LNG (75mg.) 2 doses taken 12 h apart both taken with 72 h of unprotected sexual intercourse [2]. LNG is available as an OTC drug. IUCD inserted within five days of unprotected sexual intercourse is very effective with a failure rate of only 1%. It acts by inhibition of fertilization and implantation whereas the hormonal methods act primarily by inhibition of ovulation. The effectiveness of hormonal methods is between 75-95%, if used within 72 h of unprotected sexual intercourse [3]. Indications for EC are as follows, when no contraception has been used, contraceptive failure or incorrect use or in case of sexual assault in a women not protected by contraception [4].

Nursing personnel are an integral part of any health care system. They act as reliable source of information for the general public who are exposed to them. The knowledge and attitude of nursing personnel towards contraception can grossly influence the contraceptive practices of the community as they act as both health educators and service providers. Lack of awareness, misconceptions and negative

attitude towards EC in nursing personnel can both act as a barrier for their personal use and also prevent them from promoting EC to the beneficiaries. Very few studies have been done in our country in this area. So to explore their knowledge and attitude towards EC, we carried out this study on the nursing personnel working in a medical college hospital.

MATERIALS AND METHODS

This is a descriptive cross-sectional study done in Sree Mankulavinayagar medical college and hospital, Puducherry, India to assess the knowledge, attitude and practice of EC among nursing personnel which includes staff nurse, ANM and nursing tutors.

After obtaining administrative and ethical committee approval, all the nursing personnel working in Sree Manakulavinayagar Medical College hospital (no =320) irrespective of their marital status were invited to participate in this study. They were briefed about the objectives of the study. One hundred eighty five members who consented to participate in the study were administered a self administered questionnaire.

This questionnaire was predesigned and pretested by the investigators and contained information on age, marital status, designation, years of experience followed by 14 questions on knowledge regarding EC like indication for EC, mode of action, availability, side effects and timing of administration of EC. Attitude towards EC was assessed using 10 questions which included questions on safety, willingness to use and recommend and willingness to attend awareness programmes on EC. Questions on practice of EC were optional as our study included both married and single nurses. Confidentiality was maintained as they did not disclose their name.

For evaluation of knowledge participants had to respond to statement using Yes / No / Do not know. They were given 1 point for correct answer and no point for a wrong answer or an unknown

S. No.	Statements	Correct Response	Wrong Response
1	OC pills in high doses (Yuzpe regimen) is used as EC	140 (75.67%)	45 (25.34%)
2	Indication for EC	80 (43.24%)	105 (54.75%)
3	Time limit for administering (72 hrs) EC	85 (45.94%)	100 (54.05%)
4	Common side effect (nausea)	57 (30.81%)	128 (69.18%)
5	Time interval for repeat dose of EC (12 hrs)	73 (39.45%)	112 (60.54%)
6	Contraindication to EC (confirmed pregnancy)	130 (70.27%)	55 (29.72%)

[Table/Fig-1]: Response to statements regarding knowledge of Emergency Contraception

S. No.	Statements	Correct Response	Wrong Response	Do not know
1	IUCD is used as EC (yes)	66 (35.67%)	90 (48.64%)	33 (17.83%)
2	Mifepristone is used as EC (yes)	90 (48.64%)	70 (37.83%)	19 (10.27%)
3	LNG is available in pharmacy as an OTC drug (yes)	57 (30.81%)	109 (58.91%)	18 (9.72%)
4	Availability of EC in govt. hospitals (yes)	140 (72.67%)	29 (15.67%)	14 (7.56%)
5	EC protects against STD (No)	86 (46.48%)	90 (48.64%)	9 (4.86%)
6	CuT can be used as an ongoing method of contraception (yes)	110 (59.43%)	47 (25.4%)	25 (13.51%)
7	Mode of action is by causing abortion (No)	75 (40.54%)	95 (51.35%)	14 (7.56%)
8	EC can be used in a regular basis (No)	94 (50.81%)	79 (42.7%)	12 (6.45%)

[Table/Fig-2]: Response to statements regarding knowledge of Emergency Contraception

response. To assess attitude we used a five point Likert scale. Data was analysed using SPSS software. Descriptive analysis using percentages, mean and SD was used. One-way-ANOVA test was used to determine association among categorical variables. A p-value <0.05 was considered as significant.

RESULTS

Among 185 participants 141 held the position of staff nurse, 21 were ANM, 8 were senior staff with more than 6 yrs of experience and 15 were nursing tutors.

The responses to the statements reveal that at least 1/3 rd of the participants were aware of Yuzpe regimen. Only 43.24% were sure about indication for EC. Nearly 45.94% were aware of the time limit for administration but only 39.45 % were correct about the time interval for repeat dose [Table/Fig-1]. 70.27% responded that EC is contraindicated in early pregnancy as it does not act as an abortifacient, but when directly questioned about mode of action 51.35 % had responded that EC acts by causing abortion. Only 35.67% were aware that IUCD could be used as EC but nearly 48.64% were aware of Mifepristone. Awareness that EC pills are available OTC was only 30.81% which is an important observation. More than 1/2 (50.81%) of the participants had correctly said that EC could not be used in a regular basis [Table/Fig-2].

EC was felt safe by 56.75% for its users and nearly half of them were ready to use EC personally. 67.56% wanted more awareness programmes by the government and 72.97% were willing to attend them. 61.62% responded positively that using EC was better than undergoing abortion but only 37.29% had a positive attitude that EC was good for reproductive health [Table/Fig-3].

The mean knowledge score and attitude score of the 185 participants as per their designation is shown in [Table/Fig-4,5].

Of these significant association was found between the duration of experience and attitude scores of staff nurse [Table/Fig-6]. The number of married and single nurses was 65 and 120 respectively and no significant association between marital status and knowledge or attitude score was found.

S. No.	Statements	Positive (%)	Negative (%)	Do not know (%)
1	EC is safe for its users	105 (56.75)	61 (32.97)	19 (10.27)
2	Willing to use EC	88 (47.56)	61(32.97)	26 (14.05)
3	Will recommend EC to others	106 (54.29)	41 (22.16)	38 (20.54)
4	Awareness programmes to be promoted by government	125 (67.56)	36 (19.45)	24 (12.94)
5	Using EC is better than abortion	114 (61.62)	45 (24.32)	26 (14.05)
6	EC will encourage high risk behaviour	48 (25.94)	84 (45.4)	53 (28.64)
7	Willingness to attend awareness programme	135 (72.97)	22 (11.89)	28 (15.13)
8	Purchase of EC OTC will be embarrassing	75 (40.54)	59 (31.89)	51 (27.56)
9	EC will discourage regular use of contraception	69 (37.29)	69 (37.29)	47 (25.4)
10	EC is good for reproductive health	69 (37.29)	81 (43.78)	35 (18.91)

[Table/Fig-3]: Statements to assess attitude regarding Emergency Contraception

Designation	Knowledge score		Attitude score	
	Mean	SD	Mean	SD
Staff nurse (n=141)	6.76	2.41	32.79	5.84
ANM (n=21)	5.76	1.7	33.48	5.26
Senior nurse (n=8)	7.75	2.61	37.38	5.55
Nursing tutor (n=15)	8.47	1.55	31.93	5.85

[Table/Fig-4]: Knowledge and attitude scores according to designation

Knowledge	No (%)	Attitude	No (%)
Good	97 (52.43)	Positive	95 (51.35)
Poor	88 (47.56)	Negative	90 (48.64)

[Table/Fig-5]: Positive attitude towards Emergency Contraception

Designation	Years of experience	No	Mean KS	p-value	Mean AS	p-value
Staff nurse (n=141)	0-5	132	6.67	0.169	32.35	0.007
	6-10	7	8.43		39	
	>10	2	7		37.5	
ANM (n=21)	0-5	15	5.8	0.968	32.47	0.177
	6-10	5	5.6		34.8	
	>10	1	6		42	
Senior nurse (n=8)	0-5	0	0	0.852	0	0.483
	6-10	3	8		39.33	
	>10	5	7.6		36.2	
Nursing tutors (n=15)	0-5	7	8.71	0.156	31.14	0.379
	6-10	6	7.67		31	
	>10	2	10		37.5	

[Table/Fig-6]: Association between duration of experience and the knowledge and attitude

Regarding practice, 56.75% of the participants, were using either a temporary or permanent method of contraception. Only 22.7% of them had ever used EC but 27.02% had undergone induced abortions.

DISCUSSION

In our study 97 participants (52.43%) had good knowledge on the general information on and 95(51.35%) had a positive attitude towards EC. Takkar et al., who studied awareness of EC in working women which also included nursing personnel had reported that only 11.2% were aware of EC and only 10.3% had practiced EC whereas the willingness to use EC was 81% [5].

A similar study carried out in Sikkim reported that only 28% had actual knowledge on EC and 40% had a positive attitude towards EC

[6]. In our study 30.81% of the participants were aware that EC was available OTC but 74% in the above study had awareness about its availability [6]. In a study done in Nepal on nursing personnel 65.5% knew about the dosage and administration of EC and 88.78% were aware that IUCD can be used as EC [7].

We observed that only 35.67% were aware about IUCD as a form of EC but 48.64% had said that mifepristone can be used as an EC. Thapa in his study also reported that 78.18% of their participants had a positive attitude towards EC, 80% of their participants said that EC was safe for its users and 91.7% were ready to use EC personally whereas in our study 56.75% considered it as safe and only 47.56% were ready to use EC [7]. Similar to our findings no statistically significant difference between duration of experience and knowledge was noted [7].

The mechanism of action of EC pills is still not clear even to practicing doctors as conveyed in a study by Khan et al., who reported that 96% of the doctors claimed that ECP's worked by preventing implantation [8]. A study on nursing students who would be future service providers showed that 25.5% thought that EC acts as an abortifacient and 52.14% were not sure whether EC prevents against STD [9]. In our study too, 51.35% thought that EC acts by causing abortion and 48.64% said that EC may prevent STD. In a study carried out in Government dispensaries in Delhi which also included nursing personnel along with doctors and pharmacists, 6.1% of ANM and 5.6% of lady health visitors knew about the correct constituents, whereas right dose was known to 27.8% of staff nurse and 28% of ANM. Only 7.7% knew that it should not be given to those with confirmed pregnancy [10]. In the above study 90% said that EC should not be used in a regular basis whereas in our study only 50.8% agreed to it.

Eventhough 56.75% of our participants were protected by temporary or permanent method of contraception, 27.02% had undergone induced abortions. It is noticeable that eventhough 51.35% had a positive attitude towards EC, the actual use of EC was very low (22.7%). This indicates that participants had many misconceptions and apprehension regarding its use. 67.56% of participants wanted government to create more awareness programmes and 72.94%

had expressed willingness to attend these programmes which should be utilized to create awareness among them.

National Demographic and Health survey shows that only 1% of married women had ever used ECP's and less than 1/3rd of unmarried women knew about ECP's [11]. Along with mass media, health care providers can do their part in promoting the use of EC which is a effective and safe method to prevent pregnancy.

CONCLUSION

Nurses with a complete knowledge and positive attitude towards EC can act as effective counsellors to the public to create awareness, improve their understanding and change their attitude towards EC. So, training programmes to nursing personnel on EC is mandatory and regular updates are also essential to them regarding various aspects of contraception.

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Date of Submission: **Jun 29, 2014**
Date of Peer Review: **Aug 02, 2014**
Date of Acceptance: **Aug 13, 2014**
Date of Publishing: **Sep 20, 2014**

FINANCIAL OR OTHER COMPETING INTERESTS: None.