

Frequency of Adequate Knowledge and Attitude of Females of Reproductive age towards IUCD as Emergency Contraception after an Unprotected Intercourse

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ABSTRACT

Objective: The objective of this study is to determine the frequency of adequate knowledge and attitude of females of reproductive age about IUCD as emergency contraception after an unprotected intercourse.

Study Design: Cross sectional study

Settings: Obstetrics & Gynecology, D. G. Khan Hospital D. G Khan

Study duration: 6 months (April 2021 to October 2021)

Procedure for data Collection: A total of 305 females who met the selection criteria were enrolled in the study through the OPD of the Department of Obstetrics and Gynecology at D. G. Khan Hospital D. G Khan. All females were asked for their knowledge and attitude towards IUCD as emergency contraception by researcher herself. A predesigned proforma was used to assess their knowledge and attitude of females towards IUCD as emergency contraception. Knowledge and attitude was labeled.

Results: In this study 274(89.94%) women's knowledge was adequate regarding IUCD as EC and 156(51.15%) women showed positive attitude for it. Knowledge adequacy for IUCD was higher in women in the age group 30-40 years as compared to lower age group. I.e. 20-30 years. I.e. 20-30 years: 88.9% vs. 30-40 years: 91.2% (p-value=0.511). However no statistically significant difference was observed for knowledge adequacy in both age groups women. The same trend was seen for positive attitude of women for IUCD in terms of age group. I.e. 20-30 years. I.e. 20-30 years: 48.9% vs. 30-40 years: 54.4% (p-value=0.344).

Conclusion: Results of this study showed high level of knowledge and positive attitude of women for IUCD use as EC. EC has the potential to provide women with an important fertility control option. Healthcare providers can play an important role in educating their patients about EC.

Keywords: EC, IUCD, Knowledge, Pregnancy.

INTRODUCTION

Effective contraceptive methods have been shown to improve sexual life, health and partner relationships, as well as greatly reduce maternal & neonatal mortality by preventing unplanned pregnancy, fertility rate & high parity.⁽¹⁾ According to WHO, annually pregnancies rate is 210 million, out of which, 38.0% are unwanted and 22.0% end up with abortion worldwide.⁽²⁾

A woman can use emergency contraception to avoid pregnancy after unprotected sex or if another method of contraception has failed. The emergency contraceptive pill and the copper intrauterine device are the two methods of emergency contraception (IUD). Both the methods are effective at preventing pregnancy if they are used directly after unprotected sex. Though, the IUCD is always 99.90% effective.⁽³⁾

Emergency contraception (EC) can prevent unintended pregnancies, but existing methods are only effective if used as soon as possible after sexual intercourse and before ovulation.⁽⁴⁾ A reproductive-age woman is a candidate for EC if she seeks care within 120 hours of unprotected intercourse, that is the window of pregnancy risk associated with a given act of intercourse based on the estimated lifespan of sperm in the genital tract.⁽⁵⁾

In Pakistan study reported, out of 548, 92(16.8%) had awareness about EC, 265(48.4%) of them have positive attitude towards emergency contraception but only 64(11.1%) of them have ever used emergency contraceptives.⁽⁶⁾ s. While another study reported that, only 12.0% women were aware about EC while among literates, 29.0% were aware about EC out of which only 4.37% had idea about the correct dosage, availability & side effects of the pills.⁽⁷⁾ But one study among students has reported that knowledge about EC is high i.e. 85.5%, while only 60.2% had a positive attitude towards it.⁽⁸⁾ However, according to another study, 52.43 percent of participants had good knowledge of general EC information, and 51.35 percent had a positive attitude toward EC.⁽⁹⁾

The rationale of this study is to assess the knowledge and attitude of emergency contraception and IUCD among females of

reproductive age. EC contraceptive methods are available that can be used to avoid unwanted pregnancy but due to lack of knowledge, attitude and practice of EC, unwanted pregnancy cannot be evaded.

Literature has also reported controversial results in different areas of the world. In common practice, it has been observed that among females of local population, the knowledge and attitude towards contraception is very poor and no local data is available on the basis of which we can estimate and plan proper family planning system. Through this study we want to measure the current knowledge and attitude of females for EC. So that in future this can help to control population growth rate as well by controlling number of unwanted pregnancies and can help to improve maternal and child health.

METHODOLOGY

This descriptive cross sectional study was conducted from April 2021 to October 2021 in the Obstetrics & Gynecology Department, D. G. Khan Hospital D. G Khan. It was done with the permission of the hospital's institutional review board. Patients gave their informed written consent. 305 sample size was calculated with 5% level of significance & 80% power of test by taking expecting percentage of good knowledge of EC i.e. 27.2% among females of reproductive age group.

All females presented with reproductive age 20-40 years with any parity seeking contraception or gap between two consecutive pregnancies were included from the study. Lactating, unmarried and sterile females who cannot reproduce were excluded from the study.

Demographic data was also be noted. Then all females were asked for their knowledge and attitude towards IUCD as emergency contraception by researcher herself. A predesigned proforma was used to assess their knowledge and attitude of females towards IUCD as emergency contraception.

Data was entered in SPSS 23. Age were presented as mean and standard deviation. Categorical data like adequate knowledge

and positive attitude of IUCD as emergency contraception were presented as frequency and percentages. Data was stratified according to age & education status. Post-stratification chi-square test was applied to compare the stratified groups. P-value less than 0.05 was taken as significant. Frequency was also calculated for parity.

RESULTS

In this study, total 305 females were included. The mean ages was 29.59± 6.00 years. Minimum and maximum age of females was 20 and 40 years. There were 34(11.15%) who were primary parous and the remaining 271(88.85) women were multiparous. Table: 1

In this study, 149(48.9%) females had heard about IUCD as EC, 161(52.8%) females knew that EC should be taken within 48-72 hours. 68(22.3%) said that abortion is common complication of EC, 71(23.3%) said ectopic pregnancy, 75(24.6%) said infection while 91(29.8%) said perforation is common complication of EC. , 86(28.2%) females said that EC can protect up to 3years, 66(21.6%) said that EC can protect up to 5years, 82(26.9%) said that EC can protect up to 7years and 71(23.3%) said that EC can protect up to 12years. 118(38.7%) said that if EC removed, conception will occur immediately, 90(29.5%) said that after 6months while 97(31.8%) said after a year conception occur after EC removal. Table: 2

Table 1: Age & Parity Distribution

Age	Mean+ SD	Frequency (%)
		29.59+6.003
Parity	1	34(11.1%)
	2	120(39.3%)
	3	84(27.5%)
	4	67(22%)

Table 2: Frequency of Knowledge about IUCD related Question

	Yes
Have you heard of IUCD as EC	156(51.1%)
	149(48.9%)
Time for taking EC	48-72 Hours
	>72 hours
Commonest side effects of IUCD as EC	Abortion
	Ectopic pregnancy
	Infection
	Perforation
How long it can protect against pregnancy	3 year
	5 years
	7 years
	12 years
How quickly fertility return after IUCD removal	Immediately
	After 6 months
	After a year
Expulsion rate of IUCD	0-5 %
	5-15%
	15-30%
	>50 %
What is the risk of infection associated with IUCD	0-2 %
	5-7%
	7-12%
	12-15%
Duration of EC and intercourse	Immediately
	1 week
	1 month
How does IUCD affects dysmenorrhea	No effect
	Exacerbate it
	Decreases it
Knowledge adequacy of women	Yes
	No

Table 3: Frequency Attitude about IUCD as EC

Attitude Questions	Yes	No
Would you ever use it as EC, if the need arises	210(68.9%)	95(31.1%)
Would you recommend it to a friend or relative in case of need	18(59.3%)	124(40.7%)
Positive attitude among females	156(51.15%)	149(48.85%)

Table 4: Knowledge & Attitude of Females regarding IUCD as EC stratified for Age Groups

		Age Group		P value
		20-30 years	31-40 years	
Knowledge of women regarding IUCD as EC stratified for age	Yes	160(88.9%)	114(91.2%)	0.511
	No	20(11.1%)	11(8.8%)	
Positive attitude of women regarding IUCD as EC stratified for age	Yes	88(48.9%)	68(54.4%)	0.344
	No	92(51.1%)	57(45.6%)	

Table 5: Knowledge & Attitude of Females regarding IUCD as EC stratified for Parity

		Parity		P value
		1-2	3-4	
Knowledge of women regarding IUCD as EC stratified for age	Yes	135(87.7%)	139(92.1%)	0.205
	No	19(12.3%)	12(7.9%)	
Positive attitude of women regarding IUCD as EC stratified for age	Yes	78(50.6%)	78(51.7%)	0.860
	No	76(49.4%)	73(48.3%)	

Table 6: Knowledge & Attitude of Females regarding IUCD as EC stratified for Age Education

Knowledge & Attitude		Education			P value
		Illiterate	Under Matric	Graduate	
Knowledge of women regarding IUCD as EC stratified for age	Yes	93(91.2%)	89(87.3%)	92(91.1%)	1.119
	No	9(8.8%)	13(12.7%)	9(8.9%)	
Positive attitude of women regarding IUCD as EC stratified for age	Yes	53(52%)	59(57.8%)	44(43.6%)	0.12
	No	49(48%)	43(42.2%)	57(56.4%)	

82(26.9%) females said that expulsion rate is 0-5%, 82(26.9%) females said that expulsion rate is 5-15%, 75(24.6%) said that expulsion rate is 15-30% but 66(21.6%) said that expulsion rate is >50%.82(26.9%) said that risk of infection associated with EC is 0-2%, 65(21.3%) said 5-7%, 81(26.6%) said 7-12% but 77(25.2%) females said 12-15%had risk of infection. , 102(33.4%) said that immediately after sex EC should be taken, 94(30.8%) said after 1week while 109(35.7%) said after 1month. 111(36.4%) females said that IUCD does not affect dysmenorrhea, 99(32.5%) said EC exacerbate it, 95(31.1%) said decrease it. Table: 2

Mean score for knowledge of women regarding adequacy for IUCD as emergency contraception after an unprotected intercourse was 18.85±2.63. As per knowledge questions adequacy of knowledge reading IUCD as emergency contraception after an unprotected intercourse was seen in 274(89.94%). Table 2

About 68.9% females reported that they will use EC if need arises while 59.3% said that they will recommend it to their friends or relatives in case of need. Positive attitude for IUCD as emergency contraception after an unprotected intercourse was seen in 156(51.15%) women only. Table: 3

It was observed that women in the age group 31-40 years had more knowledge about IUCD as compared to that of women in the age group 20-30 years. However this difference in both groups was not statistically significant. i.e. (p-value=0.511). Women had positive attitude about IUCD as compared to that of women in age group 20-30 years. There was also statistically insignificant difference in both groups. (p> 0.05). Women with parity and education level had knowledge about IUCD and positive attitude as shown in table 5 & 6.

DISCUSSION

EC is likewise called as "post coital contraception" which is a sort of present day contraception which is utilized after unprotected sex. On the off chance that EC is utilized appropriately, a wide range of EC pills can decay the shot of undesirable pregnancy >75% which brings about decrease of undesirable pregnancy and hazardous fetus removal.⁽¹⁰⁾

Shiferawt has showed that about 24.1% of females of reproductive age group had knowledge about EC after intercourse, 229 (46.8%) of females students had favorable attitude towards it.⁽¹¹⁾ Results of our study has somewhat similar results reported by Shiferawt in his study regarding the adequacy of knowledge and positive attitude as women of reproductive age groups for IUCD as EC.

Golezar in a study reported that 2% of the participants had good knowledge about ECs and 16% had positive attitude toward it. She also showed no significant correlation among level of knowledge, attitude and age.⁽¹²⁾ Although in this study women's adequate knowledge and positive attitude regarding use of IUCD and EC was higher as that reported by Samira Golezar. However, the fact that there is no significant relationship between age, adequacy of knowledge, and positive attitude corresponds with Samira Golezar's findings.

In Pakistan study reported, out of 548, 92(16.8%) had awareness about EC, 265(48.4%) of them have positive attitude towards emergency contraception but only 64(11.1%) of them have ever used emergency contraceptives. (6) s. While another study reported that, only 12.0 % of women were aware of EC, while 29.0% of literates were aware of EC, with only 4.37% knowing about the correct dosage, the pills' availability & side effects. (7)But one study among students has reported that knowledge about EC is high i.e. 85.5%, while only 60.2% had a positive attitude towards it.⁽⁸⁾ In 2016 study,295(65.5%) females were aware of emergency contraception, and 211 (71.5%) had utilized them.⁽¹³⁾

There is slight variation reported in different studies for knowledge and positive attitude towards IUCS. But still except few studies most of the studies show poor knowledge/less knowledge and low positive attitude of women towards IUCD use as in EC after unprotected intercourse. Local studies from Pakistan reported lower knowledge and less positive attitude towards IUCD as EC. This might be due to cultural and religious values of our society and family set up and the decision of use of IUCD as EC.

Women understanding about current knowledge, attitudes & practices regarding contraception and EC is essential. Contraception is widely accepted in Islam, and it's frequently regarded as important in Pakistan for child spacing. A few studies from Pakistan revealed a lack of awareness of EC,⁽¹⁴⁾ However, it is similar to what's been reported in many other developing countries like Mexico, India & Iran.^(15,16) The knowledge and understanding of EC among women in Pakistan & India is same, which could be recognized to the women's similar backgrounds, status & living conditions.^(17,18)

In comparison to other Muslim countries, it is higher in Kuwait, where 6.1 % of women had heard of EC & 8.0% of 250 women of childbearing age in Tehran were aware of emergency contraception.⁽¹⁹⁾ Though, over the last 2 centuries, people awareness of IUCD as an EC has developed. In other Islamic countries, awareness level is lower among all age groups.⁽²⁰⁾

Most female students lack adequate knowledge and have an unfavorable attitude toward EC. Regardless of the high proportion of unprotected sex against pregnancy, the study also criticized the lower utilization of EC. As a result of the findings, it is suggested that strategy & policymakers develop suitable evidence-based methods & curricula in institutions of higher education to prevent unplanned pregnancy & promote the use of EC on a need-to-know basis.

Despite a high level of awareness, contraceptive use is relatively low in our setting. Desire to have a larger family, the husband's pressure, the main reasons for contraceptive non-use are religious concerns & fear about side effects. Hence the need to improve female education in order to improve their understanding and use of modern contraceptives. Teenagers should be encouraged to use contraception. Religious leaders must play an

important role in trying to clarify numerous aspects of contraception.

CONCLUSION

Results of this study showed low level of knowledge and positive attitude of women for IUCD use as emergency contraception. EC has the potential to provide women with an important fertility control option. Women's lack of knowledge about EC use & availability may account for some of its limited use. Hence the need to enhance women's education about EC.

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