

SURVEY OF PATIENT AWARENESS AND BELIEFS REGARDING EMERGENCY CONTRACEPTION

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ABSTRACT

Objective: To investigate patient's knowledge and beliefs regarding emergency contraception and its use.

Study Design: Cross-sectional descriptive study

Place and Duration of Study: A six months cross-sectional descriptive study, from 1st July 2009 till 31st December 2009 carried out at Shifa international Hospital (SIH) and Shifa community health centre (SFCHC) Islamabad.

Patients and Methods: All married women of reproductive age coming to SIH or SFCHC clinics after informed consent were interviewed regarding their knowledge of emergency contraception.

Results: A total of 770 women were interviewed, but the data was completed for 759 women. 131 women (17.3%) had knowledge about emergency contraception but only 79 (10.4%) had actually used this method for contraception.

Conclusion: There is a very low awareness level regarding emergency contraception among women of developing countries even in the urban population.

Keywords: Awareness, Emergency contraception, Reproductive age women.

INTRODUCTION

Emergency contraception (EC) is defined as any method women uses after intercourse to prevent pregnancy¹. The different methods of EC include the use of intrauterine devices and hormone pills, such as the over-the-counter hormonal method known as Plan B². When inserted within five days of unprotected intercourse, a copper-bearing IUD is the most effective form of emergency contraception available. The emergency contraceptive pill regimen recommended by WHO is one dose of Levonorgestral 1.5 mg, taken within five days (120 hours) of unprotected intercourse.

Several mechanisms of action have been suggested in the literature for the effectiveness of EC. One possible mechanism of action is the inhibition or delay of ovulation³⁻⁶. A second possible mechanism is a histologic or biochemical alteration of the endometrium that impairs endometrial receptivity to implantation of a fertilized egg^{4,7}.

According to the United Nations Population Fund (UNFPA) the contraceptive prevalence rate is 22.8% in Pakistan recently. Although illegal, the abortion rate of Pakistan is 29 abortions per 1,000 women of reproductive age⁷. These rates show the unmet needs of contraception because of the gaps in reproductive health knowledge. This illegal practice leads to a rise in maternal mortality ratio which presently UNICEF calculates as 1:74⁷.

Use of emergency contraception is an alternative method for women not using regular contraception. The method is cheap and devoid of any serious long term effects. Prescription and use of EC is low in Pakistan as a large proportion of the population is unaware of its availability.

In this study our objective was to assess the level of awareness in women regarding emergency contraception and its use.

PATIENTS AND METHODS

This cross sectional descriptive study was carried out at Shifa International Hospital (SIH) and Shifa community health centre (SFCHC) Islamabad Shifa International Hospital and Shifa community health centre deals with the population of the cities of Rawalpindi, Islamabad and their suburbs. Since Shifa

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international Hospital is a private Hospital and Shifa community health centre is a funded facility there is a difference in the socio economic strata of the patients. The study was conducted from 1st July 2009 till 31st December 2009. All married women of reproductive age group who willingly consented were included in this study. Patients who didn't consent for study, age >35 and with medical disorders were not included. Sample size was 770 out of which 759 completed the required information. Performa based questionnaire was made available at all out patient counters. For the purpose of uniformity the authors sat down and chalked out a comprehensive explanation for each of the terms used in the questionnaire in the local language so that patients can be explained the questions in a uniform way. The survey focused on basic demographics, knowledge-based questions, and attitude questions about EC. All patients coming to SIH or SFCHC after registration were referred to their respective outpatient clinics. Any member of the team (author or co-author) would then proceed to the waiting area and after informed consent asked questions and their answers were marked on the study questionnaire.

We had a mix number of women coming from all social classes and hence we compared the prevalence of EC awareness in the different educational and economic groups. Data analysis was undertaken using SPSS 14. Descriptive statistics were used to analyze the data. Frequency and percentage distribution were calculated for all items. Chi-square tests were used to determine the relationship between EC knowledge and its relationship to education and socioeconomic status. Significance level was set at *p*-value less than 0.05.

RESULTS

Out of the 770 women interviewed complete data for 759 women was available. The great majority 70.8% of our patients belonged to the 20-35 years age group with mean age of 28 years (SD ± 2.04). 17.4% of the women belonged to the more than 35 years age group. About 50% of the patients were of the 6000-10000 monthly earning groups with a

smaller contribution of the lower and upper socio-economic groups. The mean income was 8800 (SD ± 9.64). Most women 58.5% had

Table-1: Socio demographic factors and contraceptive choices of the study population (n=759).

Age	Categories	Frequencies
	<20	90 (11.9%)
	20-35	537 (70.8%)
	>35	132(17.4%)
Education		
	Primary and less	74(9.7%)
	Up to secondary	351(46.2%)
	Above secondary	334(44%)
Monthly income (Rs)		
	5000	197(26%)
	6-10000	375(49.4%)
	>10000	187(24.6%)
Parity		
	1-2	205(27%)
	3-5	444(58.5%)
	>5	110(14.5%)
Contraceptive method used		
	None	411(54.2%)
	Barrier	264(34.8%)
	Hormones +IUCD	84 (11%)

between 3 to 5 kids with a mean of 4 (SD ± 1.02).

Our study showed that 70% of the patients belonged to age group 20-35 years and were educated up to secondary levels. More than half of the population 54.2% was not using any contraception and the commonest contraception used was condoms (34.8%). Table-1

Awareness of EC was seen in 131 (17.25%) women. But out of these 131 only 79(60.30%) women had actually used EC. Most of these 79 EC users; 66 (83.5%) women, thought that EC

was successful and again out of these 79 users, 56 women (70.8%) felt that EC was easily available.

of them, whereas 35.8% felt that they were contraceptive agents and 12% had no clue whatsoever. Aksu et al (2009)⁹ in his study on

Table-2: Relationship of EC knowledge with socio-economic and educational group.

Education		Knowledge of EC		p-value
		Yes	No	
	Primary and less	0(0%)	74(100%)	<0.001
	Upto secondary	16 (4.56%)	335 (95.4%)	
	Above secondary	115(34.4%)	219 (65.5%)	
Monthly income				
	5000	0 (0%)	197 (100%)	<0.001
	6000-10000	52 (13.8%)	323 (86.13%)	
	>10000	79 (42.2%)	108 (57.7%)	

When comparing education level and socioeconomic status with awareness of EC we observed as predicted that higher the educational attainment and socioeconomic status the more was EC awareness. Table-2.

DISCUSSION

In present study 70.8% women had received up to secondary education and 76% of the women interviewed were of the lower and middle socioeconomic group. The contraceptive prevalence in the study population was 45.8% since majority of the women were urban residents. But according to national statistics when rural and urban areas are combined the contraceptive use rate falls to 22.8% only⁷.

The most interesting fact was that 76% of the women relied on condoms for contraception, which is well known for a high failure rate with prolonged use on account of the accidents associated such as condom leaks, spills etc. In contrast a study regarding contraceptive awareness and use from Nepal showed depo provera (11.0%) is the most widely used followed by oral contraceptive pills (4.5%) and condom (4.5%)⁸. Their dependence on more reliable methods of contraception lead to fewer incidences of unplanned pregnancies and illegal abortions.

In this study only 17.25% (131) women had some knowledge of emergency contraception. EC was thought as an abortifacient by 51.9% (68)

Turkish women also felt that barriers to the use of emergency contraception were the lack of awareness and misconception that the pills were abortion inducing and unavailable without prescription⁹.

Because of poor knowledge and the misconception regarding the probable mechanism of action of EC although 131 women in our study knew about it but only 60.3% of them had ever used it. A study of knowledge of emergency contraception among women of child bearing age at teaching hospital of Karachi summarized that 88% of women were not aware of emergency contraceptive¹⁰.

In a study from Australia done to determine if availability of a dedicated over the counter ECP pack in Australia increased knowledge and use of emergency contraception (EC) they saw that more women expressed awareness of the ECP after it became available over the counter but finally concluded that among women seeking termination of pregnancy wider availability of the ECP has increased women's awareness of EC but not use¹¹.

When we cross tabulated education with EC knowledge the pattern was very significant and the p-value was <0.005. Similar positive correlation was seen between economic status and awareness. Lower socioeconomic group showed lack of awareness while awareness

increased from 13.8% to 42.2% as we climbed up the economic group ladder. Like wise Novikova N et al felt that there was a significant trend to increased use of the ECP in women of higher educational level ($p < 0.005$). The use of EC did not increase significantly with improved availability and access¹¹.

Open-ended interviews explored the perceived mechanism of action of the pill, side-effects, non-contraceptive benefits, and general knowledge of contraception in an American study. Findings revealed complex connections between traditional and scientific information. The use of medical terms (e.g. 'hormone') illustrated attempts to integrate new information with existing knowledge and belief systems. Studies related that existing information and services may not be sufficient if population-specific knowledge and beliefs are not assessed and addressed¹³.

CONCLUSION

We feel that women education is the most volatile factor in maneuvering the contraceptive rates. Reproductive health counseling of all women with special emphasis on all methods of family planning including EC is a must for all practicing doctors and physicians. EC is not discussed as a possibility with women counseled for family planning. Campaign to increase physician and patient awareness regarding EC may decrease the unmet need of family planning hence decreasing maternal

morbidity caused by termination of unwanted pregnancies.

CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

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