

EMERGENCY CONTRACEPTION - WHERE DO WE STAND

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ABSTRACT

Objective: To assess the awareness and practice of emergency contraception among individuals of reproductive age presenting to outpatient department, CMH Kharian.

Study Design: Cross sectional observational study.

Place and Duration of Study: Outpatient department of Combined Military Hospital Kharian from Jan to Jun 2014.

Material and Methods: A sample of 500 individuals of child bearing age (60% female and 40% males) attending outpatient department at CMH Kharian during months of Jan to Jun, 2014 was obtained. Data were collected by doing in person interviews and filling out questionnaire which assessed the awareness and practice of emergency contraception.

Results: A total of 13.4% of individuals had awareness regarding emergency contraception (EC) irrespective of gender, parity, education and socioeconomic status (SES). The familiarity regarding different methods of EC was even lower. Among the participants 91.8% were not familiar with different methods of EC, while, 3% had awareness regarding OCPs, and 1.0% knew about IUD as being methods of EC. A total of 68% percent of individuals did not consider any options of EC as being safe. Among the participants 74% did not use any method of contraception.

Conclusion: This study highlights poor knowledge regarding emergency contraception irrespective of gender, SES, parity, and education of individuals. There is a complete lack of practice of EC. Furthermore there is limited practice of contraceptive use in spite of its availability and government and non-government organizations are putting efforts to increase awareness in this regard. This is mostly due to conflicting information, myths and negative attitude towards contraception.

Keywords: Emergency contraception, Knowledge, Practice, Reproductive age.

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INTRODUCTION

Pakistan, the sixth largest nation in the world, is facing numerous obstacles in terms of controlling its population. Even though Pakistan was a pioneer among developing countries in supporting family planning activities¹, it is still unable to effectively control its growth rate. When compared to other South Asian neighbors Pakistani families have been slower to adopt family planning practices².

Globally, contraceptive use has risen, from 54% in 1990 to 63% in 2007³. However, in Asia the use of modern contraception is less than global

average. During the years 2000-2009 only 47% of married women aged 15-49 years' used modern contraception⁴. In India the contraceptive prevalence rate is 40%⁵. The situation in Pakistan is even worse. Pakistan is the lowest among its regional neighbors and some other developing countries in using contraceptive methods⁶. According to UNICEF the contraceptive prevalence rate (CPR) in Pakistan for years 2007-2012 was 27%. While most developed countries like USA have CPR of 70%⁷.

Inadequate use of modern contraception and high incidence of unplanned pregnancies are important factors contributing to high fertility rate in Pakistan. Women are aware of high mortality and morbidity risks from seeking an abortion but nevertheless opt for this to attain their goal of a small family size rather than a

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modern method of contraception. Throughout the world, unplanned pregnancies are being dealt with the use of various methods of emergency contraception (EC). According to WHO, EC or post-coital contraception, refers to methods of

effective the sooner after intercourse it is taken⁹. The second method of EC is the use of copper bearing IUD within five days of unprotected intercourse. This is a highly effective method of contraception that not only provides emergency

Table-I: Socio demographic characteristics of study participants.

	Frequency (n)	Percentage (%)
Gender		
Female	300	60.0%
Male	200	40.0%
Age (Years)		
<20	14	2.8%
20-40	432	86.4%
>40	54	10.8%
Occupation		
Army	24	4.6%
Other	476	95.2%
Spouse Occupation		
None	203	40.6%
Army	249	49.8%
Other	48	9.6%
No. of Children		
None	164	32.8%
1-2	169	33.8%
3-4	119	23.8%
>4	48	9.6%
Education		
Illiterate	75	15.0%
<or Metric	231	46.2%
Intermediate	90	18.0%
Masters	104	20.8%
Income (Rupees)		
<20000	230	46.0%
20000-40000	172	34.4%
>40000	98	19.6%

contraception that can be used to prevent pregnancy in the first few days after intercourse⁸.

EC is available in the form of pills and intrauterine devices (IUD). Among these the most commonly used are the progestin containing pills because they are more effective and cause less side effects⁹. These pills are taken within five days of unprotected intercourse. According to WHO, several studies have shown that Levonorgestrel regimen is 52–94% effective in preventing pregnancy and this regimen is more

contraception but also allows long term method of contraception. In Pakistan, both methods of EC are available. Studies have shown that even though ECPs are available in Pakistan they still remain relatively unknown and under used method of emergency contraception¹⁰. In this study, we will compare knowledge regarding EC in both male and female population of child bearing age residing in a semi urban area of Pakistan. Also, we will evaluate the use of any form of contraception among the reproductive age group in this area.

MATERIAL AND METHODS

This was a cross-sectional observational study done at combined military hospital (CMH) Kharian, Pakistan from Jan to Jun 2014. A non probability convenience sample of 500 individuals of reproductive age (18-45 years) out of whom 60% were female and 40% males presenting to outpatient department of CMH Kharian was included. Both unmarried and married male/female subjects participated in the study. Subjects below 18 years were excluded. An informed consent was obtained from all participants and their confidentiality was ensured. A questionnaire was used to collect the data regarding awareness, and practice towards emergency contraception. Participants were asked various questions in Urdu and the questionnaire was filled by individuals collecting

how she should exercise her right which shows the trend of contraceptive practice. Descriptive statistics and frequency were calculated on respondent's socio demographic characteristics. Association of gender, parity, socioeconomic and educational status to contraceptive awareness was determined by chi square test to find the significance. A *p*-value of 0.05 was considered significant for inference. All the data collected were analyzed using SPSS software.

RESULTS

A total of 500 individuals participated in the study, 60% were females while 40% were males. Among these 86.4% belonged to age group 20-40 years. The demographic profile of participants is given in table-I. When inquired about knowledge of EC only 13.4% of individuals had awareness

Table-II: Association of demographic variables with awareness of emergency contraception.

Variable	Awareness		<i>p</i> -value
	Yes	No	
Gender			0.07
• Males	10	190	
• Females	55	245	
Education			<0.001
• <Matric / HSSC	8	298	
• >Matric / HSSC	57	137	
Parity			<0.001
• <2	25	309	
• >2	40	126	
Se Status			<0.001
• 20,000 – 40,000	25	377	
• >40,000	40	58	

the data.

In the questionnaire the demographic profile of patients was included. The subjects were asked if they had heard about emergency contraception and awareness of different methods of EC. They were asked about the use of any method of contraception by the participant/partner and if individuals responded as "yes" then they had to specify the method used. They were inquired about the safest method of avoiding pregnancy after unplanned intercourse and asked opinion regarding, whether a woman has the right to decide the number of children she wants and

about it. The knowledge regarding Pills and IUDs as being a method of EC was 3% and 1% respectively.

Table-II shows association of different variables with emergency contraception. Chi-square statistic was used to determine association between gender, parity, education and socio economic status of participants and knowledge of EC, which was significant (*p*-value<0.05) for all except gender. The familiarity about different methods of EC was poor irrespective of gender of participants and males and females had significantly similar view on use of any method

of contraception. Majority of participants irrespective of gender did not use any method of contraception.

Participants were inquired about safest method of contraception after unprotected intercourse. The options included; Pills, IUDs, abortion and none. Sixty-eight percent individuals selected none, while 10% chose pills and 16% picked IUDs as being the safest method of contraception after unprotected intercourse. While 3.8% considered abortion as the safest method of contraception in that situation. Surprisingly, 1.8% individuals mentioned BTL (bilateral tubal ligation) as one of the options to be used to avoid pregnancy after unprotected intercourse. Twenty three percent of participants did not agree that women have the right to choose the number of children they wanted to bear.

DISCUSSION

Family planning is about preventing needless deaths. Countries that fail to provide adequate resources in this area are at risk of having shattered families, pointless deaths and

the results found in another study, where no significant difference was observed among male and female participants regarding emergency contraception¹¹. Overall awareness was lower across all age groups in Southeast Asia and other Islamic countries as compared to results in Europe and North America¹⁰.

When inquired about different methods of EC, the knowledge was minimal. Only 13% individuals knew about EC. These results are similar to the outcomes of studies done in India¹² Nepal¹³ and Pakistan^{14,10}. However some studies done in South Africa¹⁵ and Pakistan¹⁶ showed slightly better awareness of EC. A study done in Larkana, Pakistan also a semi-urban area showed that only 3% females admitted using EC and among those only 0.75% used OCP (oral contraceptive pills) while 0.25% used IUDs²². When we inquired our participants regarding preferred method of EC, 16% picked IUD while only 10% picked OCPs. Even in western world like USA and Australia EC is under-utilized in spite of being available over the counter¹⁴.

It was observed that as the socio-economic status (SES) and education level of participants

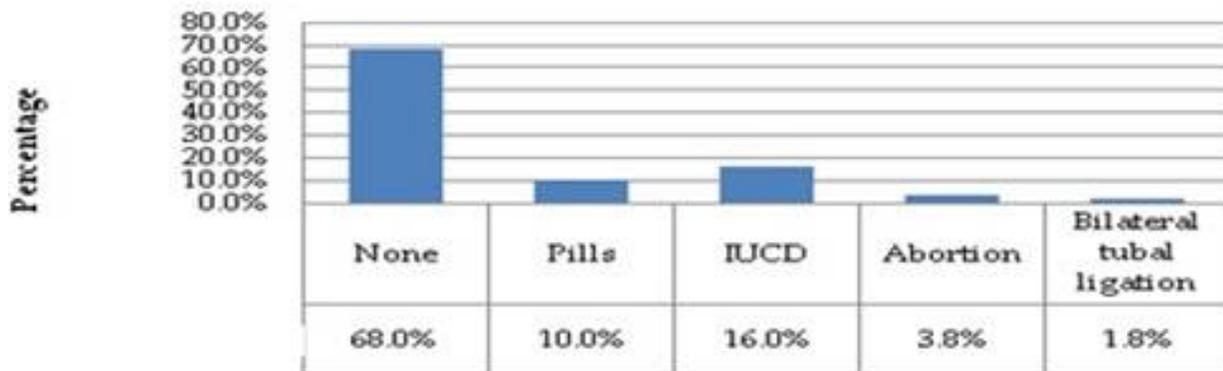


Figure: Knowledge of study participants regarding safest method of emergency contraception.

unnecessary suffering. Government of Pakistan is making efforts and policies to handle this situation but still many women who could benefit have never heard of it¹⁰.

The results of this study convey lack of knowledge of emergency contraception irrespective of the gender. This correlates with

improved the awareness regarding EC and contraception in general increased as well. This is in accordance with several other studies where it is concluded that education level plays a significant role in terms of awareness regarding contraception in general¹⁷⁻²⁰ and specifically EC¹³. A study of knowledge of EC among doctors revealed that 50% knew about different methods

of EC but 87% admitted they have never prescribed EC²¹.

In addition to this, association was found between family size and use of contraception. This correlates with the study done in Saudi Arabia where family size had strong association with knowledge and attitude regarding contraception²². Furthermore, a study done by Jabeen et al showed that use of contraception was higher among grand multi para when compared with primigravida females²³. This is similar to results of our study.

Our study shows that even in this modern era, almost one fourth of our population still believes that women do not have the right to decide the number of children they wanted to bear. This compares with a study in which 23% would choose the right to decide individually but 75% would discuss with partner before use, 2.5% said that decision should be taken by husbands alone. Similar to our study women are willing to risk their lives by choosing not to seek safer contraceptive options but rather resort to unsafe abortions or producing large number of children which is detrimental to their health as well as an economic burden¹⁰.

CONCLUSION

This study shows that there is lack of use of modern contraception including EC in Pakistani semi-urban areas. This is due to poor knowledge of emergency contraception in our population irrespective of gender, SES, parity and education. The practice of contraception is limited inspite of its availability and government and non-government organisations putting efforts to increase its awareness. This is mostly due to conflicting information myths & negative attitudes towards contraception.

CONFLICT OF INTEREST

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

REFERENCES

- Rukkanuddin AR, Hardee CK. Can family planning succeed in Pakistan? *Int Fam Planperspective* 1992; 18: 109-21.
- Hegan AC, Fikree FF, Sheali AA. Fertility and family planning trend in Karachi, Pakistan. *Int Fam Plan Perspective* 1999; 25: 38-43.
- World Health Organization. Geneva: WHO; 2014 15. 5. 14 demographic and socioeconomic statistics. available from <http://www.who.int/topics/familyplanning>.
- Najafi-Sharjabad F, Yahya SZ, Abdul Rahman H, Manaf RA. Barriers of Modern Contraceptive Practices among Asian Women: A Mini Literature Review. *Glob J Health Sci* 2013; 5: 181-92.
- Nivedita K, Fatima shanthini N. Knowledge, attitude and practice of emergency contraception on nursing personnel. *J Clin Diagn Res.* 2014; 8(9): 20-22.
- WHO/Contraception, 2014. available from www.who.int/entity/gho/maternal_health/reproductive-health/contraception/em/-28.k.
- Bibi S, Memon A, Memon Z. Contraceptive knowledge and practices in two districts of Sindh Pakistan. A hospital based survey. *JPMA* 2008; 58: 254-7.
- Von Hertzen H, Piaggio G, Ding J, Chen J, Song S, Bartfai G et al. Low dose mifepristone and two regimens of levonorgestrel for emergency contraception: a WHO multicenter randomized trial. *Lancet*, 2002; 360: 1803-10.
- Trussell J, Ellertson C, Von Hertzen H, Bigrigg A, Webb A, Evans M, et al. Estimating The effectiveness of Emergency contraceptive pills. *Contraception* 2003; 67: 259-65.
- Irfan F, Karim IS, Hashmi S, Ali S. Knowledge of emergency contraception among women of childbearing age at a teaching hospital of Karachi. *J Pak Med Assoc* 2009; 59(4): 235-40.
- Dunn S, Guilbert E. Emergency Contraception. *J Obstet Gynaecol Can* 2012; 34(9): 870-8.
- Takkar N, Geol P, Saha PK, Dua D. Contraceptive practices and awareness of emergency contraception in educated working women. *India J Med Sci* 2005; 59: 143-9.
- Tuladhar H, Marahatta R. Awareness and practice of family planning methods in women attending gynae OPD at Nepal medical college teaching hospital. *Nepal med coll J* 2008; 10(3): 184-91.
- Shaikh S, Shaikh AH, Shaikh SA. Emergency contraception: Its knowledge among women of Larkana. *Medical Channel* 2010; 16: 3: 429-31.
- Myer L, Mlobeli R, Cooper D, Smit J, Morroni C. Knowledge and use of emergency contraception among women in the western cape province of South Africa: a cross-sectional study. *BMC Women's Health*, 2007; 7: 1416.
- Naz S, Tayyab S, Ali L, Yasir R. Emergency Contraception: knowledge and attitude among females. *J of Surg Pak* 2009; 14: 216: 89-92.
- Zafar MI, Ford N, Ankomah A. Significance of beliefs and values predicting fertility and contraceptive behavior in Pakistan. *Pak J Bio Soc Sci*, 1995; 27: 301-18.
- Kanoja JK, Nirbhavane NC. Dynamics of contraceptive practice among urban Indian women. *Natil Med J India* 1996; 9: 109-12.
- Gautam AC, Seth PK. Appraisal of knowledge, attitude and practices (KAP) of family contraceptive devices among rural Rajput's and scheduled caste of Hatwar area of Bilaspur district, Himanchal Pradesh. *Anthropol* 2001; 4: 289-92.
- Chebaro R, El Tayyara L, Ghazzawi F, AbiSaleh B. Knowledge, attitude and practices about contraception in an urban population. *East Mediterr Health J* 2005; 11: 4.
- Singh S, Mittal S, Anandalakshmy PN, Goel V. Emergency contraception: Knowledge and views of doctors in delhi. *Health populperspecissues* 2002; 25(1): 45-54.
- Al-Mansour R, Sabra AA, Hafez AS. Contraception: knowledge, attitude and practice with special emphasis on contraceptive pills among Saudi women at Al-khobar city, Saudi Arabia. *Egyptian J Comm Med* 2012; 30: 2: 1-13.
- Jabeen M, Gul F, Wazir F, Javed N. Knowledge, attitude, and practices of contraception in women of reproductive age. *Gomal J Med Sci* 2011; 9: 223-29.