EMERGENCY CONTRACEPTION; KNOWLEDGE AND ATTITUDE OF FAMILY PHYSICIAN OF A TEACHING HOSPITAL, LAHORE

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ABSTRACT… Objectives: To assess the knowledge of family medicine health care providers and their attitude towards emergency contraception (EC) in Lahore Medical and Dental College and out-patient centers of Ghurki Teaching Hospital Lahore. **Data Source:** Medline Data Base. **Design of Study:** Cross sectional descriptive study. **Duration:** 3 months period, from March to June 2011. **Materials & Methods:** Faculty physicians from different specialties, residents, and medical officers were included in the study. Data was collected on a structured pre-coded 21 –item questionnaire containing demographic profile of the respondents and questions concerning their knowledge, attitudes and beliefs towards emergency contraception. **Results:** In total 85 interviews were conducted with the response rate of 100%. There were 43faculty members (50%), 14 residents (16%) and 28 medical officers (32%), 51 male (60%), 34 female (40%) physicians, the majority58 (68%) were married. Although 79 of the respondents (92.9%) reported considerable familiarity with EC, objective assessment revealed deficiency in their knowledge. Only 41(48%) correctly chose menstrual irregularity not being most common side effect of Per oral emergency contraception (POEC) while only 28(32.9%) of respondents answered that EC is not an abortifacient. Only 30 respondents (35%) had an opportunity to learn about EC through workshops. Among the barriers identified 27 respondents believe that as use of POEC would promote sexual promiscuity (31%)and 59 were concerned about birth defects/ side effects (69%).Religious and ethical barriers were also a concern in 57(67%) and 62(69%) of the respondents respectively. Overall attitudes regarding emergency contraception were positive, however 45(52.9%) were unsatisfied with their current knowledge and 77 (90%) were interested in learning more about EC. **Conclusions:** Physicians need more detailed information about EC, which would increase the application rate of the users and decrease their own prejudices

Key words: Contraception, emergency contraception

INTRODUCTION

One of the major determinants of fertility level is contraception. In the developing world, an estimated 122.7 million women have an unmet need for contraception[1]. Almost half of the Asian countries had a contraceptive prevalence of 60% or higher[2]. The high unmet need and ineffective use of contraceptives generally result in unplanned pregnancies that may end in induced abortions. According to the new estimates of abortion rates and trends, worldwide abortion rates are almost similar in both developing and developed world; however, unsafe abortions are dominating in developing countries[3].

Unsafe abortion, a major public health problem worldwide, is responsible for 13% of maternal mortality and causes 70,000 maternal deaths every year, 99% of which occur in developing countries[4].

In countries like Pakistan, where abortion is illegal only 28% of couples use some form of contraception. The high unmet need for family planning, resorting to a clandestine abortion to terminate an unwanted/unplanned pregnancy is the most likely recourse that couples resort to as a method of choice to achieve their desired family size[5].

It has been estimated that 37% of all pregnancies are unwanted in Pakistan where every year, 890,000 induced abortions are performed (29 per 1000 women aged 15-49 years)[6]. A study from Pakistan has shown that one out of 7 pregnancies terminate in induced abortion with a post-abortion complication rate of 68.5%[7] reported case fatality rates of 10.5 %[8].

Although the unintended pregnancies have significant socioeconomic implications, at the same time it can be prevented. The most important factor to prevent unplanned or mistimed pregnancies is to provide the knowledge about back-up support and use of emergency contraception in the cases of unprotected sex or method failure.

Emergency contraception (EC) is a safe and effective postcoital contraceptive method that can be used after unprotected sexual intercourse or contraceptive failure.

POEC can reduce the risk of an unintended pregnancy by at least 75% to 89% if taken within 72 hours of sexual intercourse[9]. Several methods are used, including combined hormonal contraceptives taken in high dose (the Yuzpe method), the Levonorgestrel only regimen and the insertion of Intrauterine insertion of Copper T(IUD Cu T)[10]. Currently, two 0.75-mg doses of Levonorgestrel are licensed in Pakistan for use within 72 hours of unprotected sex, even satisfactory result were shown with a single dose of Levonorgestrel initiated up to 120 hours after intercourse[11] in a multicentre trial of the WHO . Despite these facts, emergency contraception is still not widely used.

The first step towards understanding its use is to assess the knowledge of local physicians' about the methods and their willingness to prescribe EC. Extensive data is available about knowledge, attitudes, and practice patterns of obstetrician-gynaecologists[12], pediatricians, family-planning specialists, health care providers and nursing staffs with respect to emergency contraception[13] and the most notable barrier to the use of emergency contraception was lack of awareness[14]. Additionally, the topic of EC involves moral implications for patients concerning their beliefs about the beginning of life. According to a public opinion poll of more than 15,000 people, almost 50% of the population belief that life begins at conception, or when the sperm and egg join[15].

A search of Ovid Medline database showed a paucity of data from Pakistan on emergency contraception showing attitudes of family physicians. To the best of our knowledge, only few studies specifically examined knowledge attitude and practice of family medicine faculty physicians, general practioners, residents, and medical officers regarding emergency contraception[16,17].

The objectives of this study were to survey faculty, residents, and medical officers in a teaching hospital with regard to their current knowledge and attitudes towards emergency contraception and to identify barriers to its use.

MATERIALS & METHODS

Study Design

This cross-sectional descriptive study was conducted in Lahore Medical and Dental College and out-patient centers of Ghurki Teaching Hospital Lahore. Interviews were conducted among faculty physicians from different specialties, residents, and medical officers. These participants also provide care at different clinics in the city.

Data-collection Procedure

Data were collected on a structured pre-coded 21-item questionnaire. We used the Epi Info software (version 6.04) for data entry and the SPSS software (version 12.0) for analysis of data.

Survey instrument

We developed a two-page questionnaire through extensive data search of similar studies. This questionnaire had questions on various aspects of emergency contraception, including knowledge, attitudes, and behaviors. The first part of the questionnaire, demographic features of the participants were recorded. The second part consisted of questions about knowledge, attitudes, and practices relating to emergency contraception and barriers to its use.

PROCEDURE

Each participant was given the questionnaire containing 21-question and provided an option not to participate. Additional ethical requirements concerning informed consent and confidentiality were ensured by including a paragraph of informed consent at the beginning of the questionnaire.

STATISTICAL ANALYSIS

Data was entered and analyzed in SPSS (v 12). Frequency and summary statistics were calculated for all variables.

RESULTS

In total 85 interviews were conducted with the response rate of 100%, 43 faculty members (50.6%), 14 residents (16.4%), and 28 medical officers (33%). Fifty one were male (60%), 34 were female respondents (40%). Fifty eight respondents were married (68%) and had children

(47%). (Table I)

Table-I. Socio demographic characteristics of respondents

	Frequency (n=85)	%
Age in years		
25-30	43	50.6
31-35	24	28.2
36-40	18	21.2
Position		
Faculty Member	43	50.6
Resident	14	16.4
Medical Officer	28	33
Gender		
Male	51	60
Female	34	40
Marital Status		
Unmarried	27	32
Married	58	68

Only 6 respondents don't know about EC (7.1%) while 79(92.9%) were familiar with the EC. Sixty respondents (70%) have knowledge about the correct timing of POEC. Forty one (48%) physician considered menstrual irregularity was not the most common side effect of POEC while 28 respondents (32.9%) answered that EC is not an abortificent. Only33 physicians (38%) knew that POEC should be repeated if a woman vomits within 2 hours. Only 30 respondents (35%) had an opportunity to learn about EC. (Table II, Figure 1).

About 31respondents (36.5%) had opportunity to prescribe EC, about 46(51%) considered EC to be beneficial and 50respondents (58%) believed that POEC should not be used as regular contraceptive method. Thirty four physicians (40%) were satisfied with their current knowledge and about 77(90%) were interested in leaning more about EC. Sixty Five percent considered that EC is appropriate at routine consultation and should be widely advertised. (Table III, Figure 2)

Twenty seven respondents considered that POEC use would promote sexual promiscuity (31%).Fifty seven respondents were uncomfortable in prescribing POEC because of religious (67%) and ethical barriers (72%) and 59 were concerned about birth defects/ side effects (69%). (Table IV, Figure 3)

DISCUSSION

The results of the present study demonstrated the large majority (92.9%) of family physicians in our institution do have some knowledge however; 36% have actually prescribed emergency contraception. Only few7.1% of the respondents did not either know or were unsure about the concept of emergency contraception. This confirmed the findings of several previous studies which showed clear gaps in knowledge and practice regarding emergency contraception among healthcare providers, including physicians,[18] nurses,[19] paediatricians,[20] family-planning service providers, and family physicians[16,17]. This may affect provision of emergency contraception since they are involved in management, and incomplete knowledge could delay timely scheduling or administration of EC.

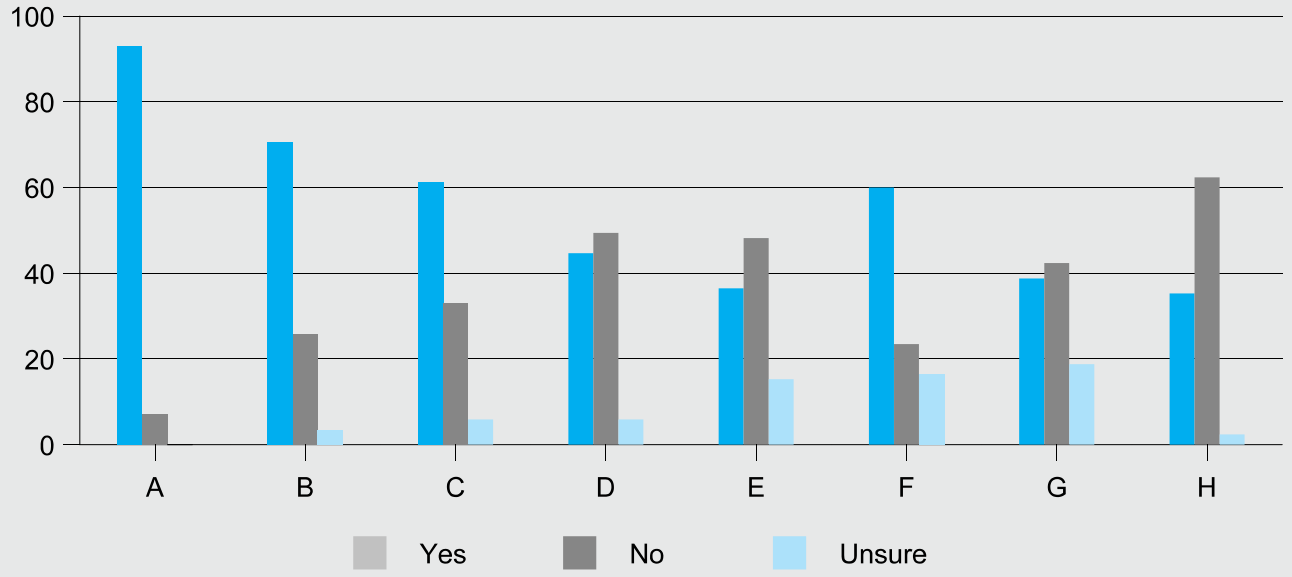
According to a similar KAP study done in North India where only 41% general practioners were vaguely familiar with the concept[12,14] and the method was scarcely known or used in Turkey because of lack of knowledge of health care providers about EC[21]. The results of our study are also comparable to KAP study about EC done in Karachi , Pakistan by Hamza M Abdulghani and co-workers showing that 70% of the family physician had some knowledge about EC but only half of them (40%) had actually prescribed it[16]. Deficiencies in their knowledge was revealed to be a major contributing factor. This influences the likelihood of women being made aware of or being given emergency contraception.

Emergency contraception has been found to be safe and effective[22] but its use is surrounded by lot of misconceptions, the commonest being emergency contraception is an abortifacient. Only 32.9% of the study subjects answered that emergency contraception is not an abortifacient while only 5% were unsure. This was similar to the findings of a study by Uzuner et al[23].

Table-II. Knowledge about emergency contraception (POEC) (n=85)

		Yes		No		Unsure	
		No	%	No	%	No	%
A	Do you know about EC?	79	92.9	6	7.1	-	-
B	Is 120 hours the correct time for initiation of POEC?	60	70.6	22	25.9	3	3.5
C	Does EC act as an abortifacient?	52	61.2	28	32.9	5	5.9
D	Is there need for pregnancy test before prescribing EC?	38	44.7	42	49.4	5	5.9
E	Is menstrual irregularity is the most common side effect of EC?	31	36.5	41	48.2	13	15.3
F	Can an IUD be effective for EC?	51	60	20	23.5	14	16.5
G	Should POEC be repeated if a woman vomits within two hours?	33	38.8	36	42.4	16	18.8
H	Did you have an opportunity to learn about EC?	30	35.3	53	62.4	2	2.4

Fig-1. Knowledge about emergency contraception (POEC) (n=85)



Previous research indicates that the primary mode of action of emergency contraception is via preimplantation mechanism. Emergency contraception, thus, needs to be positioned as an option distinct from abortion.

Forty seven percent of the study participants thought that insertion of an IUD after fertilization cannot be effective to prevent pregnancy.

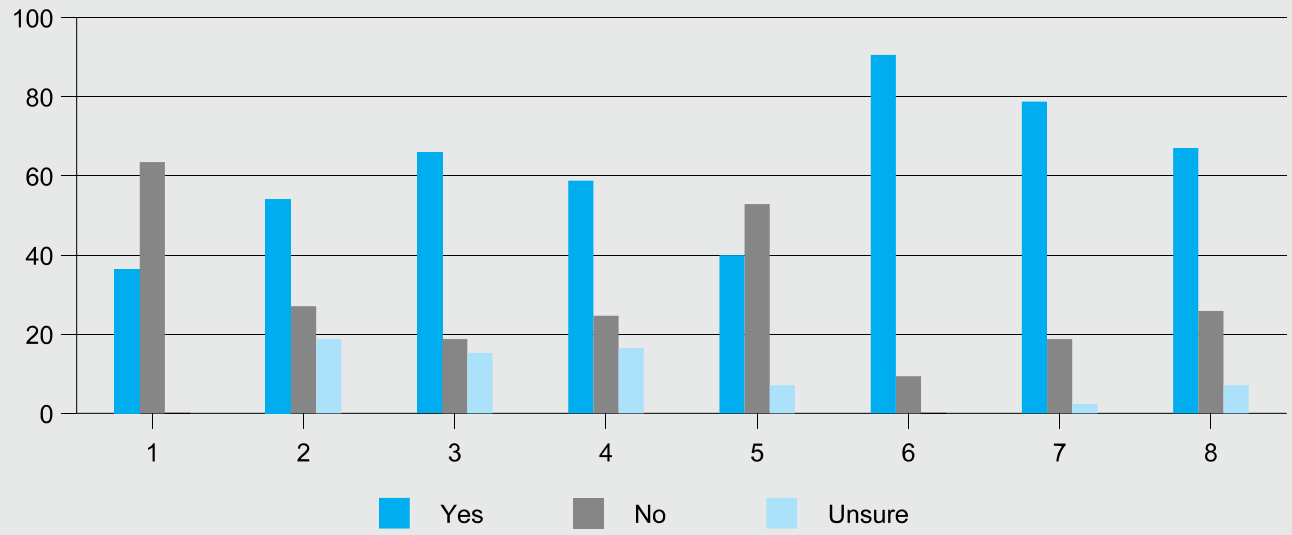
The majority (65%) of the medical practitioners had favorable attitudes and supported the availability and use of emergency contraception. More than half (67%) of the participants were uncomfortable in prescribing EC because of religious and ethical reasons which is similar to the findings of previous research[16,24] and therefore seldom inform or prescribe emergency contraception.

The findings of our study are also comparable to a similar

Table-III. Attitude (n=85)

		Yes		No		Unsure	
		No	%	No	%	No	%
1	Have you had an opportunity to prescribe EC%	31	36.5	54	63.5	-	-
2	Do you feel that benefits of EC out weight the risks?	46	54.1	23	27.1	16	18.8
3	Is EC appropriate for discussion at routine consultation?	56	65.9	16	18.8	13	15.3
4	Does EC-use discourage regular contraceptive use?	50	58.8	21	24.7	14	16.5
5	Are you satisfied with your current knowledge of EC?	34	40	45	52.9	06	7.1
6	Are you interested in learning more about EC?	77	90.6	08	9.4	-	-
7	Would you refer a case to gynecologist for prescription of EC?	67	78.8	16	18.8	02	2.4
8	Should EC more widely advertised?	57	67.1	22	25.9	06	7.1

Fig-2. Attitude (n=85)



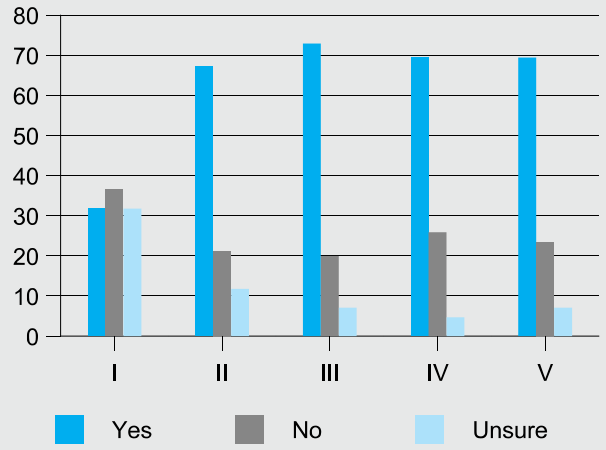
KAP study done in Lahore, Pakistan[17]. According to that study among the GP interviewed, almost all of them had a positive attitude towards EC but only 20% were comfortable to talk about EC as a backup support and the most significant reason identified was not remembering to discuss EC during routine visits. Only 10% of our GPs were regularly discussing EC. Only 16% of the doctors in Sydney included the information of EC as a part of their routine contraceptive discussion25because of the similar concerns.

This finding has significant implications. First, the health care providers may not be able to provide adequate information to those women who need to use these methods. Secondly patients may not be able to obtain adequate information from them. Lower levels of prescription have been found in studies in developing countries. In Nairobi, Kenya, 15% of family-planning service providers reported having prescribed emergency contraception 26 and 20% of primary healthcare workers recommended emergency contraception in Turkey[21].

Table-IV. Perceived barriers (n=85)

		Yes		No		Unsure	
		No	%	No	%	No	%
I	Does EC-use promote promiscuity?	27	31.8	31	36.5	27	31.8
II	Do you feel uncomfortable prescribing EC for religious?	57	67.1	18	21.2	10	11.8
III	Are you concerned about ethical reasons when you prescribe EC?	62	72.9	17	20	06	7.1
IV	Are you concerned about birth-defects/side effects?	59	69.4	22	25.9	04	4.7
V	Are you reluctant to prescribe EC because of inexperience with its use?	59	69.4	20	23.5	06	7.1

Fig-3. Perceived barriers (n=85)



Physicians who are uncomfortable prescribing emergency contraception can still refer cases to another service provider.

Regarding the satisfaction level with their current knowledge, 52.9% of the physicians were not satisfied, and 90.6% were interested in learning more about emergency contraception. Hamza M Abdulghani and co-workers also showed the satisfaction rate of 82% and 96% of the physicians were interested in learning about EC. Veloudis and co-workers reported that physicians must be knowledgeable and be able to educate their patients on contraceptive alternatives[27]. Since cases rely on physicians for information on birth control, physicians can improve the knowledge of their service-seekers about emergency contraceptive pills.

Although it is a small study with a small sample size, further studies, at both state and regional levels, can identify geographic and demographic gaps in family-planning practices.

LIMITATIONS

There are several limitations in this study. First, the results were generated in one institution and may not be generilizable to others. Only two studies conducted in Pakistan were found for comparison. There may have been some acceptability bias among provider-respondents. Research in the community setting in particular would provide a broader understanding of family physicians with a more exclusive focus on clinical care. However, attitudes and practices relating to emergency contraception may differ among physicians.

CONCLUSIONS

Physicians need more detailed information about EC, which would increase the application rate of the users and decrease their own prejudices. Discussion about emergency contraception should be raised during routine health check-up visits of women. Future research should be directed at implementing interventions to enhance these types of discussions.

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"In the End, we will remember not the words of our enemies, but the silence of our friends."

Martin Luther King Jr. (1929-1968)