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ARAŞTIRMA

Knowledge and experience of emergency contraception in the gynecologic population of Gulhane Military Medical Academy

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Summary

The aim of the present study was to investigate the knowledge and experience about emergency contraception in our gynecologic population and to evaluate it with respect to educational level and age groups. The study was performed on 644 participants at the Obstetrics and Gynecology Department and Family Planning Unit of Gulhane Military Medical Academy. A questionnarie was performed to all participants. The rate of participants who knew emergency contraception correctly was 17.5%. The rate was higher among women who were young and whose educational level was high. Fifty three point nine per cent of women (n=347) did not know anything about emergency contraception. It may be concluded that in this population, the knowledge and the usage of emergency contraception is surprisingly low, and family planning education programs should include this type of contraception.

Key words: Emergency contraception, experience, knowledge, unintended pregnancy

Özet

Gülhane Askeri Tıp Akademisi jinekoloji popülasyonunun acil kontrasepsiyonla ilgili bilgi ve tecrübesi

Kendi populasyonumuzda acil kontrasepsiyon ile ilgili bilgi ve tecrübenin eğitim seviyeleri ve yaş gruplarına göre ilişkisinin değerlendirilmesi amacıyla bu çalışma GATA Kadın Hastalıkları ve Doğum AD Aile Planlaması ünitesinde 644 katılımcıya anket uygulanarak gerçekleştirilmiştir. Acil kontrasepsiyonu doğru olarak bilen katılımcı oranı %17.5'dir. Genç ve eğitim seviyesi yüksek olan kadınlarda bu oran daha yüksek olarak saptanmıştır. Kadınların %53.9'nun (n= 347) acil kontrasepsiyon hakkında hiçbir bilgisi yoktu. Bu çalışma ile toplumumuzun acil kontrasepsiyon hakkında düşük bilgi seviyesine sahip olduğu ve kullanım oranının düşük olduğu sonucuna varılmıştır. Acil kontrasepsiyon metodları ve kullanımı aile planlaması eğitim programlarına dahil edilmelidir.

Anahtar kelimeler: Acil kontrasepsiyon, tecrübe, bilgi, istenmeyen gebelik

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Introduction

Despite the availability of highly effective methods of contraception, twenty-five percent of pregnancies are unintentional in the worldwide. A large body of epidemiologic evidence suggest that unintentional pregnancies are a worldwide problem and affect not only women but also their families (1). Sixty percent of these pregnancies results with abortion and 33% of these abortions takes place under unsafe conditions (1). Unsafe abortions carry a higher risk of morbidity and mortality. World Health Organization declared that the maternal death resulting from an unsafe abortion was approximately 70 000/year (1). Many of these unplanned pregnancies can be avoided using emergency contraception (EC) (2,3).

EC can be described as the use of drugs or devices after an unprotected intercourse (4). This type of contraception is also known as "morning after pill" or "postcoital contraception" (4-6). It is the only reliable option of a woman for preventing pregnancy after unprotected sexual intercourse has occurred, or when another contraceptive method has failed or been used incorrectly.

Concensus Statement of Emergency Contraception (7) recommends the collection of data within each country in order to facilitate the use of EC. This recommendation and the fact that the abortion rate resulting from unintentional pregnancies is approximately 15.7% in Turkey (8) promoted us to design this study with a view of identifying the reality in the gynecologic patients of our institution.

Material and Method

The present study was conducted during September 2003 through December 2004. Concecutive women attending the Family Planning Unit of Gulhane Military Medical Academy (GATA) Obstetrics and Gynecology Department were asked to self-complete a questionnarie inquiring about their knowledge and experience of EC. Two main questions were asked to evaluate

knowledge about EC. First question was "Do you know any contraceptive method that can be used after an unprotected intercourse?" Answers that included emergency contraception, use of oral contraceptive pills in high doses, insertion of an intrauterine device (IUD) were accepted as correct. The second question was related with the critical time-frame in which the emergency contraceptive method should be used. Answers that included 72 hours for pills and 5 days for IUDs were accepted as correct. Other questions included the individual and gynecologic characteristics of patients such as age, educational level, current and previous contraceptive use (method, duration and behaviour) and availability, usage, effectiveness and information source of EC.

One of the authors interviewed women after self-completing the questionnaire to ensure that they had understood exactly what information was required from each question. At the end of the interview, EC information paper was delivered.

Data analysis was carried out using SPSS version 11.0. The main outcome measure was the correct knowledge rate of participants with regard to educational level and age group. Statistical tests used in the analysis were non-parametric (χ^2, chi-square) test multivariate test (Anova). χ^2 test was used to investigate the relations among the demographic characteristics. Statistical significance was indicated by $p < 0.05$.

Results

Of the 689 women requested for the study, 34 did not want to contribute and 11 refused to complete the questionnarie during the interview. The response rate was 93.4% and the sample included 644 completed questionnaries. The mean age of the participants was 25.78 (±3.74) The youngest women was 16 years old and the oldest was 44 years old. All of the participants were married.

Three hundred forty seven of 644 participants (53.9%) didn't know anything about EC. Some of them stated that they had never heard about nor had an idea about this issue. One hundred eighty four participants (28.6%) gave irrelevant answers to the EC questions. This group was classified as incorrect knowledge. One hundred and twelve participants (17.5%) answered the questions correctly. Of these 112, 92 knew oral contraception pills as an EC method while 14 knew IUD. Nine participants knew both oral contraceptive pills and IUD correctly.

The knowledge status of patients according to age groups is demonstrated in Table I. Among the age groups, participants under 20 years old demonstrated the highest correct or incorrect knowledge about the EC (26.9% and 42.0%, respectively). Null answers were lowest in this age group (32.1%). Sixty eight point eight per cent of women aged more than 39 years gave null answers to questions.

The knowledge status of patients according to educational level is demonstrated in Table II. Among the age groups, participants with an education of 9 or more years demonstrated the highest correct knowledge about the EC (16.9% and 20.7%, respectively). There was a significant difference between this group and the group with a 8 or less years of education ($p=0.037$). Null answers were highest in the literate group (77.8%).

Sources of information of participants are demonstrated in Table III. Among the participants who had knowledge about the EC, newspapers/magazine was the most commonly cited source of information (42.8%), while the friends was lowest (6.7%). Twenty eight per cent (92/297) of the participants stated that their knowledge source was medical care providers

Table I. Knowledge of emergency contraception according to age groups

Age Group			Knowledge status					
			Correct		Incorrect		Null	
	n	%	n	%	n	%	n	%
<20	78	12.2	21	26.9	32	41.0	25	32.1
20-24	187	29.0	33	17.6	49	26.2	105	56.1
25-29	159	24.6	29	18.2	45	28.3	85	53.5
30-34	114	17.7	16	14.0	25	21.9	73	64.0
35-39	90	14.0	11	12.2	31	34.4	48	53.3
>39	16	2.5	3	18.8	2	12.5	11	68.8
Total	644	100.0	113	17.5	184	28.6	347	53.9

Table II. Knowledge of emergency contraception according to education levels

Educational level			Knowledge status					
			Correct		Incorrect		Null	
	n	%	n	%	n	%	n	%
Literate	18	2.8	1	5.6	3	16.6	14	77.8
1-8 years	42	6.5	3	7.1	11	26.2	28	66.7
9-12 years	314	48.8	53	16.9	94	29.9	167	53.2
>12 years	270	41.9	56	20.7	76	28.1	138	51.1
Total	644	100	113	17.5	184	28.6	347	53.9

Table III. Source and correctness of information about emergency contraception

Educational level			Knowledge status			
			Correct		Incorrect	
	n	%	n	%	n	%
Newspaper / TV	127	42.8	25	3.9	102	80.3
Health Care Provider	92	31.0	68	10.6	24	26.1
Family	58	19.5	16	2.5	42	72.4
Friends	20	6.7	4	0.6	16	80.0
Total	297	100.0	113	38.0	184	62.0

and this group demonstrated significantly higher rate of correct knowledge (%74) than the other groups (p=0.014).

The currently used contraceptive method was oral contraceptive pill in 39.7% (n=255) of the participants, while 28.6% (n=184) of the participants were using condoms. Usage of intrauterine device or all the other methods was less than ten percent (9.9% and 5.1%, respectively). Sixteen point eight per cent (n=108) of the participants were not on any contraceptive methods.

Thirteen point one per cent of participants (n=84) stated that they had confronted the need of an emergency contraceptive method in their sexual life. Ten point six per cent of participants (n=68) had used one of the emergency contraception in the past.

Discussion

EC is not only a safe and effective method of contraception but also has the potential to reduce drastically the number of abortions performed in the world (7). The overall protection provided by EC (all methods) is reported in various studies to be approximately 75 percent (range 55 to 94 percent) (9,10). Emergency contraceptive pills, both combined and progestin-only pills, reduce rates of pregnancy by 75 to 88 percent if taken within 72 hours of unprotected intercourse. IUD insertion can take place within five to seven days of unprotected intercourse and can reduce a woman's chance of becoming pregnant by 99 percent (5).

One of the continuing mysteries of EC is how little it has been used, Surveys conducted in 1994 and 1995 showed that EC was not well known by consumers in the United States and was rarely prescribed by doctors. Even among obstetrician-gynecologists, who had a high degree of knowledge about EC (99%) and a willingness to prescribe it, one survey indicated that a majority (75%) prescribed EC fewer than five times a year (11,12). Among women who might have need for EC, survey data showed that only 1% had ever used the technique, even though over one half of women at risk indicated they were interested in trying it. Fully two-thirds of the women surveyed did not know that anything could be done on an emergency basis to reduce the risk of an unplanned pregnancy (11,12). The use of emergency contraceptive methods were 9% and 12% in Australia and Finland, respectively (13,14). In the present study, only 10.6% of the participants used an emergency contraceptive method. The lack of knowledge seems to be the main reason of this behaviour.

Some researchers showed that 50% to 90% of women do not know anything about EC methods (15,16). Ozturk et al. reported that the rate of knowledge about EC was 7.4% (17). Zeteroglu et al. reported the knowledge rate about EC as 38.5% among health care providers (8). In our study although the mean educational level of participants was higher than the level of public, the level of knowledge of EC was surprisingly low.

Roberts at al. found a positive association between knowledge of EC and having received formal sex education (18). We found that knowledge about EC is increasing by educational levels. However, more than half of women with at least a high school educational level didn't know anything about EC.

Women who uses postcoital contraception are reported to be commonly younger than 25 years of age, sexually active and have been used a contraceptive method in their past life (19,20). Our study demonstrated that younger participants use these methods more effectively. Sorenson et al. reported similar results (21).

In conclusion, although the rate of correct knowledge of EC in our population was higher than the rates reported in previous national studies, these rates were lower than the expected levels. We conclude that formal reproductive health and sex education should be given in schools, and emergency contraceptive methods should be inserted into the family planning programs.

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