

Knowledge, Attitude And Practice Of Emergency Contraception Among Married Women Attending Antenatal Clinics

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ABSTRACT

Background: Despite the advancements in current methods of contraception, unintended pregnancies are still widespread in the Kingdom of Saudi Arabia which adversely impact the well-being and health of women and their families.

Objectives: To determine the level of knowledge, attitude and utilization of emergency contraception among women attending ante-natal clinics at primary health care centers in Makkah, 2018.

Subjects and methods: A cross-sectional study was conducted at antenatal care clinics, Ministry of Health (MOH) PHC centers in Makkah city. A multi-stage random sample of married Saudi women in the childbearing age who were attending those clinics was recruited. Data were collected using a self-administered questionnaire composed of three main sections; socio-demographic data of the participants, questions regarding knowledge of EC use and statements assessed attitude and barriers to use EC.

Results: The study included 191 women with a response rate of 100%. Their age ranged between 18 and 49 year olds with a mean of 31.7 and standard deviation (SD) of ± 5.3 years. 78.5% of the participants knew that there is a way to prevent pregnancy in case of having unprotected sex. Internet was the commonest EC source of knowledge (45.4%), followed by doctor or family planning provider (33.4%). Majority of the participants who were aware of the existence of a method to prevent pregnancy in case of an unprotected sex ($n=150$) knew correctly the time of using emergency contraceptive pills or IUD (99.3% and 92.7%, respectively) though only 16.2% of the studied women reported ever using emergency contraception to prevent pregnancy. Almost 31.4% of the participated women were willing to use emergency contraception to prevent pregnancy in case of an unprotected sex. 68.9% among those not willing to use emergency contraception. Religious factors were the commonest reported reasons for that (59.5%). Primary school educated women had the highest percentage of the EC attitude score, rank was 128.04 while postgraduate women had the lowest percentage of the score, rank of 24.07, $p=0.001$.

Conclusion: The present study's results reveal high level of awareness knowledge regarding emergency contraception. However, low utilization was noticed mainly due to religious concerns.

INTRODUCTION

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Despite the advancements in current methods of contraception, unintended pregnancies are still widespread in the Middle East countries including the Kingdom of Saudi Arabia, which adversely impact the well-being and health of women and their families.^{1, 2} Also, a considerable percentage of women with unplanned pregnancies experienced unsafe abortion, and obstetric complications^{3, 4} The World Health Organization (WHO) reported that in developing countries, one woman dies every 8 minutes as a result of unsafe abortion.⁵ Also; they represent a burden on the health system and socioeconomic development. And these unplanned pregnancies exert an unnecessary load on countries' health systems and socioeconomic development.¹

Emergency contraception (EC) can have an essential role in preventing unintended pregnancies. Over the past several years, contraceptive tools are available in the Arab region, including KSA.⁶ Unfortunately, EC is underused worldwide.⁷⁻⁹

Despite the availability of emergency contraception tools, they are suboptimal utilized. Majority of studies carried out in developed countries¹⁰⁻¹² and developing countries¹³⁻¹⁹ reported lack of knowledge about EC and its proper utilization. Few studies have been carried out in Islamic countries, including KSA.^{13, 20-22} Many factors can impact women's attitude, and beliefs regarding EC, particularly in Islamic countries.¹³ Therefore, a better understanding of these, mostly cultural-related factors affecting the use of EC.

LITERATURE REVIEW

Online searching resulted in several studies carried out, most of them were conducted in non-Islamic countries, only one study was carried out recently in Saudi Arabia.

In Saudi Arabia (2015), Karim et al. carried out a cross-sectional survey to evaluate knowledge, attitude and barriers regarding EC among married women of reproductive age attended family practice clinics of King Khalid University Hospital, Riyadh. A minority of women (6.2%) had some knowledge of EC and of these only two women had ever used it. Regarding the source of their information about EC, health care professionals were the least reported source one (6.6%), Majority (73.3%) had a negative attitude toward EC being available over-the-counter without a prescription.

In Kuwait (2007), Marafie et al. carried out a cross-sectional study aimed to explore awareness and attitude of hormonal EC among women. Only 6.1% of the respondents had heard of hormonal EC, 1.5% had used it. Almost two-thirds (65.2%) of women would not use or inform a friend about hormonal EC.²⁰

In Egypt (2013), El-Sabaa et al. implemented a descriptive cross-sectional study to identify the awareness and use of EC tools among women of reproductive age at the family health care centers in Alexandria. Majority of the women (75.5%) did not know EC, (78.8%-79%) reported that EC could be used after unprotected intercourse and in case of failed usual methods respectively. Only one-fifth of them (21.5%) ever used EC.²¹

In California, USA (2008), Baldwin, et al. carried out an interview survey to assess awareness, knowledge, and utilization of EC among women aged between 15 and 44 years. Most of the participants (76%) had heard of EC. Awareness was lower among younger women, poor women, women with health insurance, immigrants, those without a usual source of care and rural residents. Among those aware of EC, 4% reported having used the method in the previous year.¹⁰

In Canada (2007), Shoveller et al. carried out an interview-based study to identify barriers to utilize EC among a sample of women. They perceived EC as an abortifacient, and they think that in the long-term it will have adverse effects on health and fertility.¹¹

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In USA (2004), Abbott et al. carried out a prospective survey to explore knowledge, attitudes, practices and perceived needs of EC among women aged 18 to 45 years. Among them, 77% had heard of emergency contraception as a way of preventing pregnancy after unprotected intercourse. 25% to 50% of them did not have enough knowledge on using EC pills effectively. More than half the respondents (57%) were willing to use EC pills in the future.¹²

METHODOLOGY

Study design

A cross-sectional study was adopted.

Sample size

The calculation of the sample size was done by using the Raosoft sample size calculator with assuming a 95% confidence level, 5% sampling error, and 50% probability of prevalence. The total was 377, and the minimum recommended size is 191.

RESULTS

Emergency contraception utilization

From Figure 1, it is realized that most of the participants (78.5%) knew that there is a way to prevent pregnancy in case of having an unprotected sex. 58.7% among them reported the using of emergency contraception can prevent pregnancy in case of an unprotected sex as shown in Figure 2.

Regarding the source of knowledge of the participants about the existence of a method to prevent pregnancy in case of an unprotected sex, internet was the commonest reported (45.4%) followed by doctor or family planning provider (33.4%) Figure 3

Majority of the participants who were aware of the existence of a method to prevent pregnancy in case of an unprotected sex (n=150) knew correctly the time of using emergency contraceptive pills or IUD (99.3% and 92.7%, respectively). Table 2

None of the studied demographic factors (current marital status, number of children, occupation, educational level, age and income) was significantly associated with knowledge about EC among the participants. Table 3

Also, the source of information about EC was not significantly associated with knowledge about it as evident from Table 4.

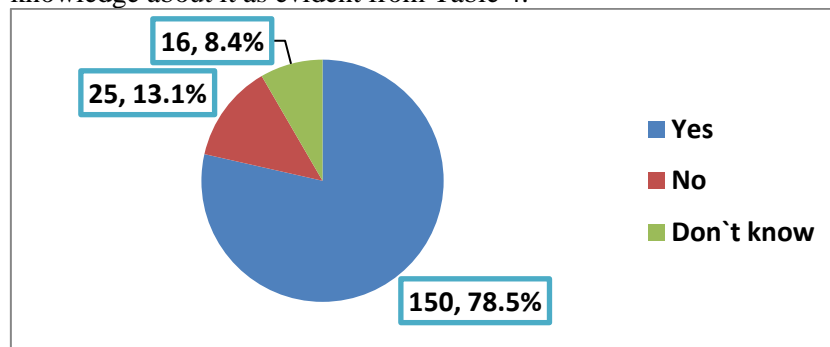


Figure 1: Knowledge of the participants regarding the existence of a method to prevent pregnancy in case of having un-protected sex.

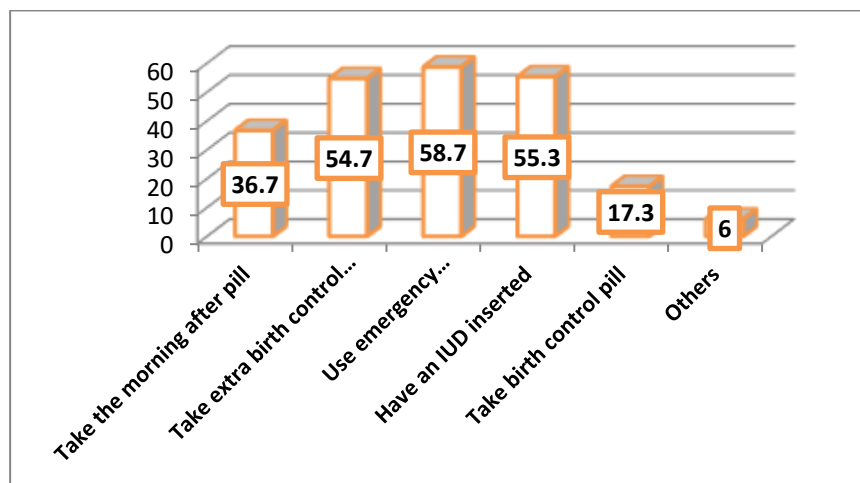


Figure 2: Procedures that can be applied to prevent pregnancy in case of having unprotected sex: participants' responses (n=150).

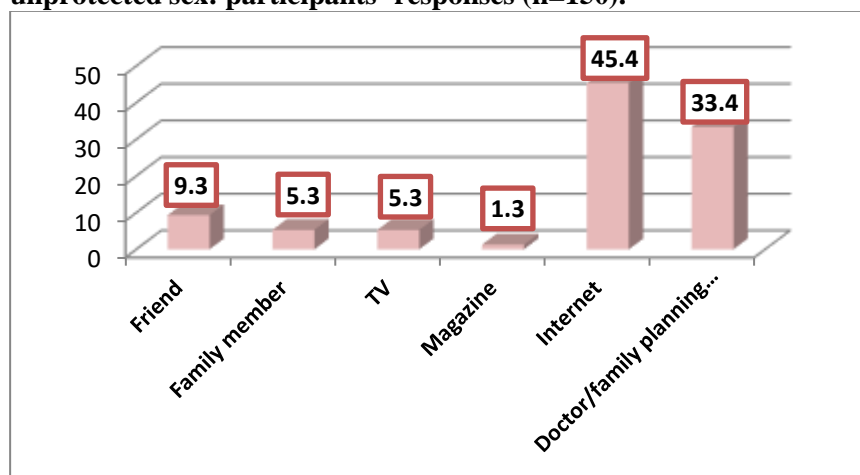


Figure 3: Source of knowledge of the participants about the existence of a method to prevent pregnancy in case of un-protected sex

Table 2: Knowledge of the participants about the correct timing of emergency contraception

Questions	Right answers	
	Number	Percentage
What is the correct timing of EC?		
Pill (Within 5 days)	149	99.3
IUD (Within 5 days)	139	92.7

Table 3: Demographic factors associated with knowledge regarding emergency contraception among the participants.

	Knowledge regarding EC		p-value
	Yes	No	
	N=150	N=41	
N (%)	N (%)		

Marital status			
Currently married (n=176)	140 (79.5)	36 (20.5)	0.196**
Ever married (n=15)	10 (66.7)	5 (33.3)	
Number of children			
One (n=48)	37 (77.1)	11 (22.9)	0.735*
Two (n=80)	65 (81.2)	15 (18.8)	
More than two (n=63)	48 (76.2)	15 (23.8)	
Occupation			
House wife (n=103)	84 (81.6)	19 (18.4)	0.436*
Teacher (n=72)	55 (76.4)	17 (23.6)	
Other (n=16)	11 (68.8)	5 (31.2)	
Educational level			
Primary school (n=6)	5 (83.3)	1 (16.7)	0.848*
High school (n=57)	43 (75.4)	14 (24.6)	
Graduated (n=121)	97 (80.2)	24 (19.8)	
Postgraduate (n=7)	5 (71.4)	2 (28.6)	
Age in years			
Mean±SD	31.5±5.1	32.6±6.2	0.212‡
Income (Saudi Riyals/month)			
<5000 (n=85)	71 (83.5)	14 (16.5)	0.290
5000-10000 (n=71)	52 (73.2)	19 (26.8)	
>10000 (n=35)	27 (77.1)	8 (22.9)	

* Chi-square test

** Fischer Exact test

‡ Student`s t-test

Table 4: Association between the main source of information about emergency contraception and knowledge regarding it among the participants

	Knowledge regarding EC		p-value*
	Yes N=150 N (%)	No N=41 N (%)	
Magazines (n=2)	2 (100)	0 (0.0)	0.837
Friends (n=7)	14 (82.4)	3 (17.6)	
Family member (n=11)	8 (72.7)	43 (27.3)	
TV (n=12)	8 (66.7)	4 (33.3)	
Internet (n=87)	68 (78.2)	19 (21.8)	
Doctor/family planning provider (n=62)	50 (80.6)	12 (19.4)	

* Chi-square test

The rate of EC utilization

Only 16.2% of the studied women reported ever using emergency contraception to prevent pregnancy as illustrated in Figure 4.

From Table 5, none of the studied factors (current marital status, number of children, occupation, educational level, age and income) was significantly associated with history of ever using EC among the participated women.

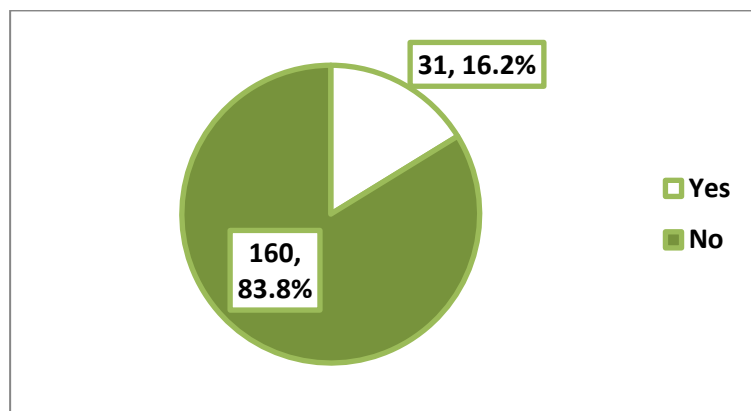


Figure 4: History of ever using emergency contraception to prevent pregnancy among the participants

Table 5: Factors associated with ever using emergency contraception among the participants.

	Ever using EC		p-value
	Yes N=31 N (%)	No N=160 N (%)	
Marital status			
Currently married (n=176)	27 (15.3)	149 (84.7)	0.210**
Ever married (n=15)	4 (26.7)	11 (73.3)	
Number of children			
One (n=48)	10 (20.8)	38 (79.2)	0.515*
Two (n=80)	13 (16.3)	67 (83.8)	
More than two (n=63)	8 (12.7)	55 (87.3)	
Occupation			
House wife (n=103)	19 (18.4)	84 (81.6)	0.451*
Teacher (n=72)	11 (15.3)	61 (84.7)	
Other (n=16)	1 (6.3)	15 (93.7)	
Educational level			
Primary school (n=6)	1 (16.7)	5 (83.3)	0.901*
High school (n=57)	11 (19.3)	46 (80.7)	
Graduated (n=121)	18 (14.9)	103 (85.1)	
Postgraduate (n=7)	1 (14.3)	6 (85.7)	
Age in years			
Mean±SD	31.1±5.3	32.0±5.3	0.065‡
Income (Saudi Riyals/month)			
<5000 (n=85)	13 (15.3)	72 (84.7)	0.828*
5000-10000 (n=71)	13 (18.3)	58 (81.7)	
>10000 (n=35)	5 (14.3)	30 (85.7)	

* Chi-square test

** Fischer exact test

‡Student`s t-test

Willing to use emergency contraception

It is realized from Figure 5 that almost one-third of the participated women (31.4%) were willing to use emergency contraception to prevent pregnancy in case of unprotected sex. Among those not willing to use emergency contraception (68.9%), religious factors were the commonest reported reasons for that (59.5%), followed by medical reasons (22.9%). Figure 6

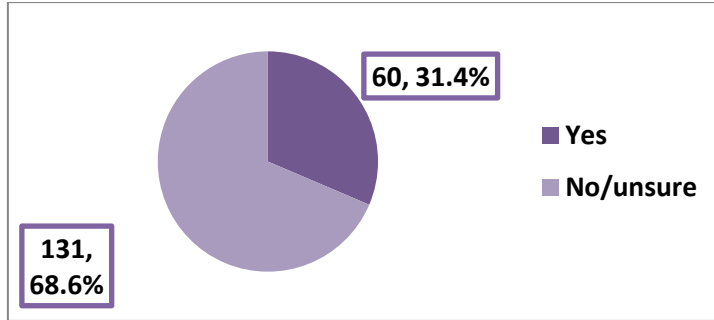


Figure 5: Willing of the participants to use emergency contraception.

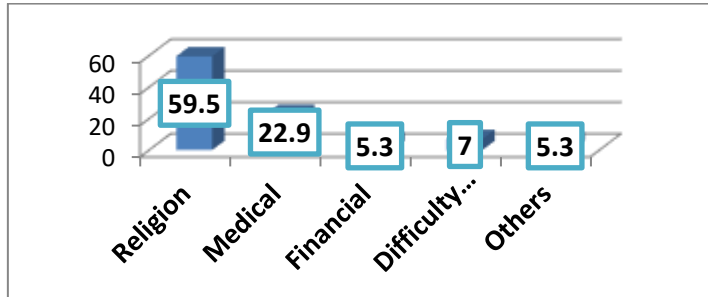


Figure 6: Reasons for not willing/unsure to use emergency contraception (n=131)

Attitude towards emergency contraception

It is evident from Table 6 that most of the participants (75.9%) were likely to use emergency contraception if they know that EC reduces the chance of pregnancy by up to 75% and 59.2% of them reported that their current pregnancy will be at risk as a result of none using contraception. However, majority of them (85.3%) had no family planning visit in past year. Nearly three-quarters of the women (74.4%) believed that EC Should be more widely advertised while 46.1% believed that EC should be available without prescription. Seventy-nine women (41.3%) would feel shy to ask for EC.

Overall, the percentage of the total attitude towards emergency contraception ranged between 18.2 and 90.9% (57.8±14.0%) with a median (IQR) of 54.5% (45.5-72.7%). Figure 7

Figure 8 shows that most of the participants (58.1%) believed that both partners should decide for EC use whereas 34% believed that the decision should come from the physician.

Primary school educated women had the highest percentage of the EC attitude score (mean rank was 128.04) while postgraduate women had the lowest percentage of the score (mean rank=24.07), p=0.001. Other studied factors (current marital status, number of children, occupation, age, income and knowledge level) were not significantly associated with percentage of the EC attitude score. Table 7

Table 6: Attitude of the participants towards emergency contraception

	Frequency	Percentage
If you know that EC reduces the chance of pregnancy by up to 75%, would you use it to prevent pregnancy?		
-Likely	145	75.9
-Somewhat likely	38	19.9
-Not at all	8	4.2
What will be the risk to your current pregnancy with or without EC use?		
-At risk/not using contraception	113	59.2
-At risk using reversible methods of contraception	78	40.8
Access to family planning provider		
-No family planning visit in past year	163	85.3
-Family planning visit in past year	28	14.7
Should EC be more widely advertised?		
-Yes	142	74.4
-No	23	12.0
-Unsure	26	13.6
Should EC be available without prescription?		
-Yes	88	46.1
-No	81	42.4
-Unsure	22	11.5
Would you feel shy to ask for EC?		
-Yes	79	41.3
-No	84	44.0
-Unsure	28	14.7

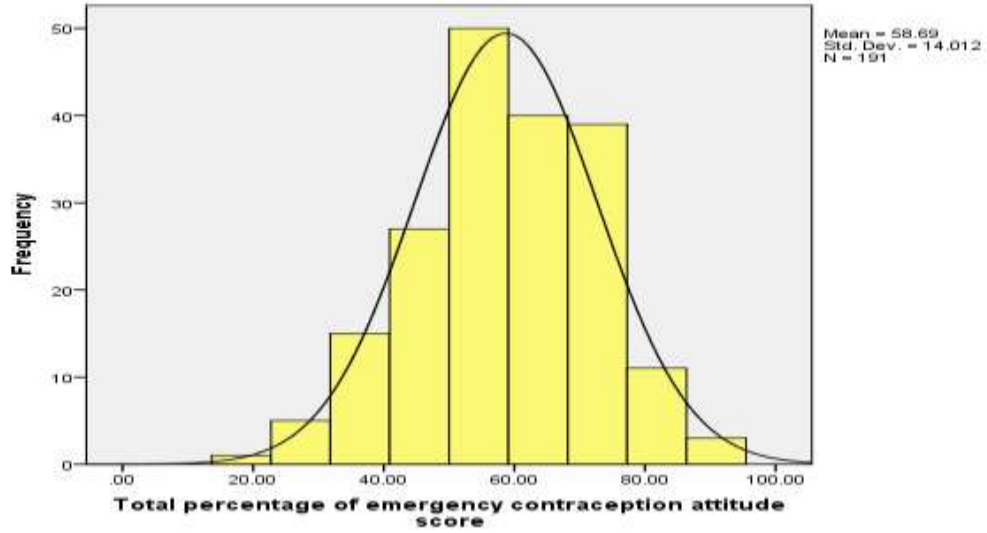


Figure 7: Distribution of the total percentage of emergency contraception attitude score among the participants

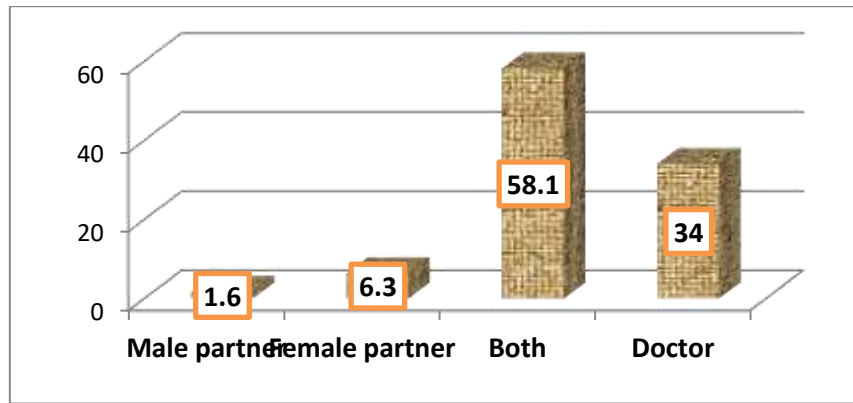


Figure 8: Who should decide for EC use, according to participants' opinion

Table 7: Factors associated with ever using emergency contraception among the participants.

	Percentage of Emergency contraception attitude score			p-value
	Median	IQR	Mean rank	
Marital status				
Currently married	54.5	45.5-72.7	95.73	0.812°
Ever married	54.5	54.5-63.6	99.20	
Number of children				
One	63.6	54.5-72.7	99.40	0.554‡
Two	54.5	54.5-72.7	98.74	
More than two	54.5	45.5-72.7	89.94	
Occupation				
House wife	54.5	54.5-72.7	100.33	
Teacher	54.5	45.5-63.6	90.33	

Other	59.1	45.5-72.7	93.69	0.478 [‡]
Educational level				
Primary school	72.7	50-75	124.08	
High school	54.5	50-63.6	87.50	
Graduated	63.3	54.5-72.7	102.77	
Postgraduate	36.4	36.4-45.5	24.07	0.001 [‡]
Income (Saudi Riyals/month)				
<5000	54.5	45.5-72.7	93.81	
5000-10000	63.6	54.5-72.7	106.89	
>10000	54.5	45.5-72.7	85.33	0.223 [‡]
Knowledge about EC				
Yes	59.1	54.5-72.7	98.42	
No	54.5	45.5-63.6	87.15	0.238 [◦]
Age (years)				
r*	-0.007			
p	0.926			

* Spearman`s correlation coefficient.

◦ Mann-Whitney test

‡ Kruskal-Wallis test

CONCLUSION

The present study`s results reveal high level of awareness and knowledge regarding emergency contraception. However, low utilization was noticed mainly due to religious concerns. Positive attitude towards EC was apparent among women in this study in some aspects. However, a considerable proportion of them believed that EC should not be available without prescription and would feel shy to ask for EC as well as majority of them had no family planning visits. Their main source of information about emergency contraception was the internet, followed by healthcare professionals.

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