
Practice and Methods of Contraception Among Saudi Women Attending King Abdul Aziz University Hospital (KAAUH) in Jeddah 2016

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Abstract: The use of contraceptives can have an impact on better spacing between children, better child care, improvement children's health and preservation of the mother's health. The current study was conducted in King Abdul Aziz University hospital to describe the contraceptives' utilization among women attending the OBS & GYNE outpatient clinic in 2016. By using a pre-designed questionnaire, a sample of 393 women was interviewed by the researcher. The analysis of the data revealed that the Saudi women constituted (61.6%), and the great majority were literate (93.9%) and they were mainly having higher graduations. Almost two thirds 237 (59.4%) had experienced the utilization of contraceptives which were mostly the oral contraceptive pills followed by IUCD, these findings were in accordance to what was found in most of the countries worldwide and also it is similar to the pattern of contraceptive use in Saudi Arabia twenty years ago. The percentage of contraceptives' users was significantly higher among women in the age group 35-<45. The longer duration for using contraceptives was recorded for the IUCD. The majority of the women who never used contraceptives indicated that it was their own decision. The great majority of the selected women (85.8%) were planning to use contraceptives in the future.

Keywords: contraception method; IUCD; hormonal contraception;

Introduction

Family planning is the key point for a planned development. "Family planning was accepted as the best way to control the rapidly and massively growing population. Individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively the social development of a country, can define family planning" ⁽¹⁾. Family planning programs make a planned and scientific approach to the issues and problems of family life and attempts to solve them to make the family life happier, harmonious and fruitful ⁽²⁾. Early, the United Nations Population Commission made an important statement on population policy: it said that each Government had the responsibility to make its own policies and devise its own programs for dealing with its population issues, and that the United Nations should encourage and assist Governments in obtaining basic population data and carrying out studies on the demographic aspects of their economic and social development problems ⁽³⁾. On these principles particularly placing family planning and contraception services within the framework of primary health care provided the impetus for some countries to begin supporting contraceptive services, at least indirectly. In the late 1990s, Kuwait and Qatar made family planning services and counseling available through public and private health facilities. The Government of Saudi Arabia moved from a rather restrictive

approach to indirect support for activities conducted by non-governmental organizations. Iraq, after a decade of rather restrictive policies, moved to direct support of contraception ⁽⁴⁾.

Contraceptive choices affect the long-term sexual health and fertility of women and men, particularly when contraception is not used correctly or consistently. For many women, the ability to control their fertility has enhanced their ability to control their lives; however, with this power has come a greater responsibility for contraception in a relationship ⁽⁵⁾.

Given that the majority of contraceptive methods available are made to be used by women and that the consequences of a contraceptive failure can have a greater impact on the life and health of a woman than on her partner, this is a vital issue in women's health. Ideally, both partners should discuss the most appropriate method of contraception and be committed to using it correctly and consistently ⁽⁶⁾.

The context in which men and women make decisions related to contraception has changed with the advent of oral contraception (OC) some 40 years ago and, more recently, with the increased awareness of HIV/AIDS and sexually transmitted infections ⁽⁷⁾.

The decision to use one contraceptive method over another is influenced by personal choice, perceptions of efficacy, personal risk, access, age, cost, gender, education, ethnicity, marital status,

current number of children, sexual orientation, pattern of sexual activity and level of co-operation between partners ⁽⁵⁾.

Material and Methods

Study type: - Cross section study.

Study area: - This study was conducted in Jeddah city which is the main seaport and is located on the western region of the Kingdom of Saudi Arabia. The study was conducted in King Abdul Aziz University Hospital (KAAUH) which is considered as one of the main hospitals in the city.

Study population: -All women attending the OBS/GYN department in King Abdul Aziz University Hospital in 2016.

Study sample:-The number of attendants to the OBS & GYNE department in King Abdul Aziz University Hospital in 2016 is estimated to be around 15000 patients, and as the study design is basically descriptive in nature, the sample was calculated by using EPI info program, putting into consideration that the proportion is 50 in order to get the maximum sample size, and putting the worst acceptable proportion as 5, with a power of 80 and a confidence level of 95% a total sample of 400 individuals was assigned.

The sample was selected from the women attending the OBS & GYNE outpatient clinics by systematic random sampling as every other attendant was enrolled in the study after being informed about the study objectives and to get her informed consent before completing the interview.

Tool of the study: - A questionnaire was designed by researcher and was tested and revised for its appropriateness for fulfilling the study objectives. The questionnaire included the following variables:

Age of the patient: which was further categorized into scale intervals including 4 scales (<25 years, from 25 to <35 years, 35 to <45, 45+ years).

Nationality: - either Saudi or non Saudi.

Literacy.

Level of education (primary, secondary or higher).

Working status.

Ever using contraceptives.

Type of contraceptive used.

Duration for using contraceptives.

Reasons for discontinuation if any.

Perspective utilization of contraceptives.

Collection of data: - The researcher was available at the outpatient clinics to interviewing the attending females and to fill the questionnaires.

Data entry and statistical analysis: - SPSS (Statistical Package for Social Scientists) ver. 15 was used for data entry and processing. The statistical

analyses used were the frequency distribution, mean and standard deviation were used to express continuous variables, in addition to Chi Square was used for cross tabulation, Also, ANOVA test was used when more than two subsets were to be compared for continuous variables. The 95% confidence level for the statistical analysis was used and p value <0.05 was considered significant.

Ethical considerations: - A request letter was applied to the responsible authorized personnel in the hospital to allow for conducting the research.

All the data pertinent to the attendants are kept confidentially and not disclosed except for the study purpose.

Results: The current study was conducted in King Abdul Aziz University hospital to explore the pattern of contraceptives' utilization by the attendants to the OBS & GYNE outpatient clinic. The sample accounted for 393 women who completed the pre-designed questionnaire which was designed to collect data that reflect their utilization of contraceptives.

The following sections will present the results of the statistical analysis of the collected data. This section will present demographic characteristics of attendants and their distribution according to their pattern of utilization of the contraceptives.

1. Descriptive characteristics of study group

1.1 Demographic characteristics.

Table 1: Demographic characteristics of the study group (n=393)

Demographic characteristics	No.	%
Age (years):		
<25	68	17.3
25-	199	50.6
35-	102	26.0
45+	24	6.1
Range	16-60	
mean SD	31.35 ± 0.39	
Nationality:		
Saudi	242	61.6
Non Saudi	151	38.4
Literacy:		
Literate	369	93.9
Illiterate	24	6.1
Level of education:		
Primary	43	11.5
Secondary	63	16.9
Higher	267	71.6
Working:		
Yes	70	17.8
No	323	82.2

The table shows that the females aged <35 constituted almost two thirds of the study group (67.9%) and there was preponderance of Saudis

(61.6%) over Non Saudis (38.4%). Also, it was noted the great majority of the females enrolled in the study were literate (93.9%) and they were mainly having higher graduations (71.6%). Meanwhile, it was remarked that the majority of them were jobless (82.2%).

2. Utilization of contraceptives:-

2.1 Types of contraceptives:-

The analysis of the data showed that 237 (59.4%) of the studied females indicated that they used contraceptives. The following figure shows the types of contraceptives used by the studied females.

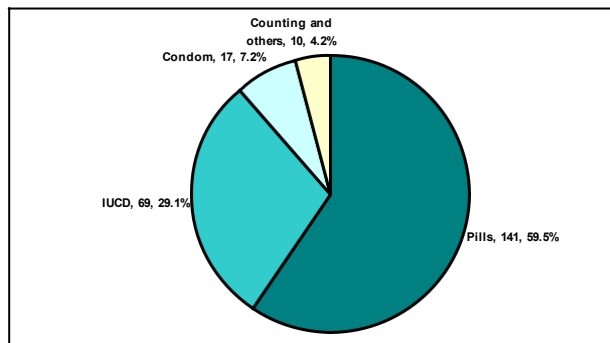


Figure 1: Distribution of contraceptives' users according to the type of contraceptives.

The above figures demonstrate that almost two thirds of the contraceptive users (59.5%) were using contraceptive pills, followed by those who had Intrauterine Contraceptive Devices (29.1), and the minority (4.2%) were following the counting methods and others.

2.2 Demographic characteristics associated with utilization of contraceptives

The table describes the differences in utilization of contraceptives according to the demographic characteristics of the studied females. It was evident that the majority (80.4%) of the females in the age group (34-44) had used contraceptives, if compared to only (38.2%) of the females aged less than 25 years who ever used contraceptives. These observed differences in the percentages of females who ever used contraceptives according to their age groups were statistically significant $p < 0.05$.

Although there was preponderance of Saudi females who ever used contraceptive (61.5%) over Non Saudi females (57.6%), nevertheless, this difference is not statistically significant $p > 0.05$. The table shows that the literate females were more likely to use contraceptives (60.7%) if compared to illiterates (50%), however this difference is not statistically significant $p > 0.05$. Moreover, it was remarked that among the literate females, the lower the levels of education the more likely is the using of contraceptives (71.4%) if compared to (55.8%) among

females with higher levels of education, and this difference is statistically significant $p < 0.05$. It was noted that there was slight non significant ($p < 0.05$) increase in utilization of contraceptives by working females (59.8%) if compared to non working females (60.9%).

Table 2: - Ever using contraceptives according to the characteristics of the studied females.

Demographic characteristics	Ever use contraceptives		p
	YES no (%)	NO no (%)	
Age (years):			
<25	26(38.2%)	42(61.8%)	0.000*
25-	112(57.1%)	84(42.9%)	
35-	82(80.4%)	20(19.6%)	
45+	14(58.3%)	10(41.7%)	
Nationality:			
Saudi	147(61.5%)	92(38.5%)	0.255
Non Saudi	87(57.6%)	64(42.4%)	
Literacy:			
Yes	222(60.7%)	144(39.3%)	0.206
No	12(50.0%)	12(50.0%)	
Level of education:			
Primary	30(71.4%)	12(28.6%)	0.022*
Secondary	45(71.4%)	18(28.6%)	
Higher	148(55.8%)	117(44.2%)	
Working status:			
Yes	42(60.9%)	27(39.1%)	0.492
No	192(59.8%)	129(40.2%)	

* Statistically significant

2.3 Duration of utilization of contraceptives

Table 3: Duration of utilizing contraceptives according to the types of the contraceptives

Types of contraceptives	Mean duration in months	SD	p
Pills	34.83	36.808	0.303
IUCD	45.32	36.922	
Condom	36.76	45.206	
Counting and others	42.80	49.562	
Overall	38.33	38.099	

Table (3) illustrates the mean duration in months for each type of the contraceptives used by the studied females. It was observed that the overall mean duration for utilization of contraceptives among the study group accounted for 38.33 months. It was noted that IUCDs were used for longer duration (mean±SD, 45.32±36.92 months) followed by counting and others (mean±SD, 42.8±49.56 months), however these differences are not statistically significant $p > 0.05$.

2.3 Reasons for non utilization of contraceptives

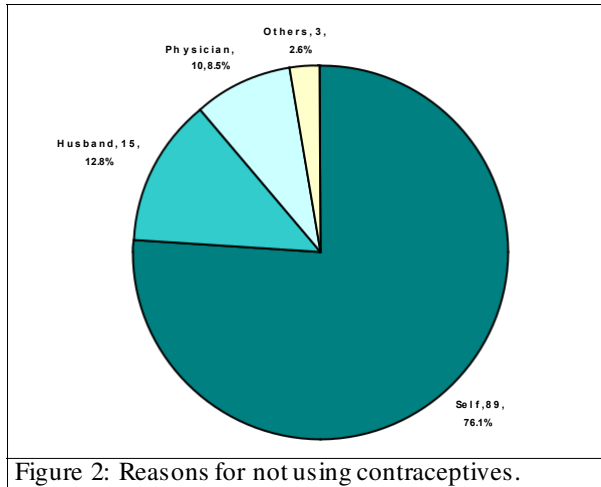


Figure 2: Reasons for not using contraceptives.

The figure shows the reasons behind non utilization of contraceptives as described by the studied females. It was obvious that almost three quarters of the females (76.1%) pointed out that the reasons for non utilizations were related to their own willingness, while those who were not utilizing it according to reasons related to the husband constituted 12.8%. On the other hand, it was noted that the minority of the females (8.5%) were not utilizing it according to the instructions of their physicians.

2.4 Perspective thinking for utilization of contraceptives

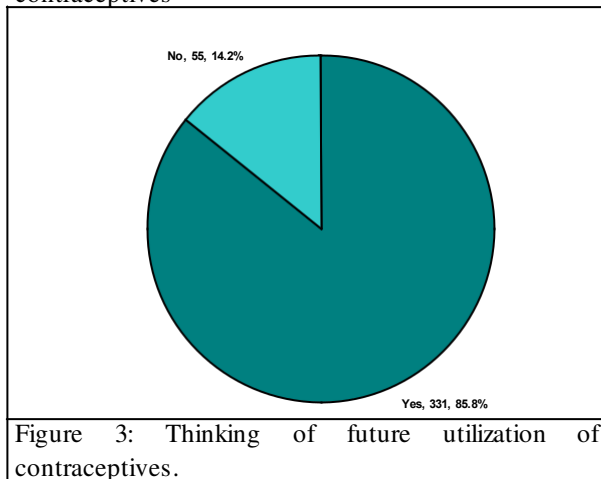


Figure 3: Thinking of future utilization of contraceptives.

The above figure demonstrates that the great majority of the studied females (85.8%) were thinking of using contraceptives in the future. To elaborate the changes in perspective thinking in utilization of contraceptives in relation to the current status after controlling for females over 45 years. The following table (table 4) shows that 107 (73.8%) of females who never used contraceptives are planning for using it in the future. On the other hand, it was found that only

12 (5.4%) of females who used contraceptives are planning to stop it in the future. This difference in the perspective utilization of contraceptives is statistically significant $p < 0.05$.

Table 4: Comparing the future perspective for utilization of contraceptives with the current status.

	Thinking of future utilization of contraceptives	
	Yes	No
Ever used contraceptives		
Yes	212 (94.6%)	12(5.4%)
No	107(73.8%)	38(26.2%)

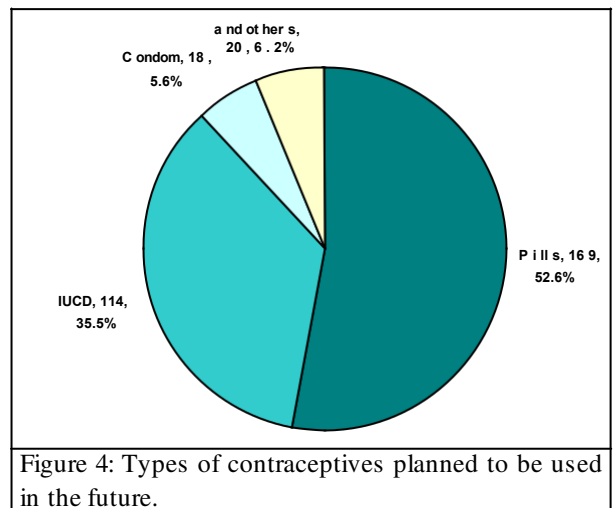


Figure 4: Types of contraceptives planned to be used in the future.

Figure 4 illustrates that almost half (52.6%) of the females are planning to use contraceptive pills in the future in addition to almost one third of the females (35.5%) are planning to use IUCD, and the rest of females are planning to use either condoms (5.6%) or counting and others (6.2%).

3. Knowledge about MIRENA: -

The figure illustrates the reply of the females on the question if they have any idea about mirena. It was evident that the great majority of the studied females (88.2%) had no idea about mirena.

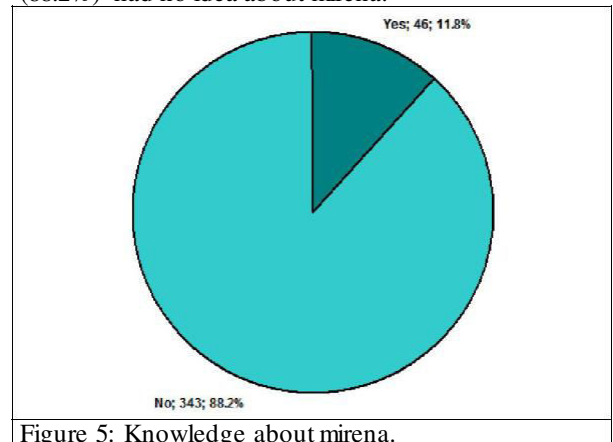


Figure 5: Knowledge about mirena.

Discussion:

The current study was conducted in King Abdul Aziz University hospital to explore the pattern of contraceptives' utilization by the attendants to the OBS & GYNE outpatient clinic. Ever using contraceptives

The study showed that 237 (59.4%) of the studied females indicated that they used contraceptives. It is interesting to find that almost the same percentage (56%) was recorded in a similar study conducted in Riyadh about 20 years ago⁽²⁹⁾, which indicates that there was no significant change in contraceptive utilization in Saudi community along that period. However, the findings of the study showed the percentage of contraceptive users were higher than what was found among Pakistani women where 47% indicated that they were using some sort of contraception. However, the percentage of females who ever used contraceptives in the current study were lower than that recorded in Brazil, where it was found in a community based research that the females who ever used contraceptives accounted for 75.4%⁽³⁰⁾, that could be attributed to the ethnic differences among different communities.

Types of contraception used by the study group:

Contraception choices affect the long-term sexual health and fertility of women and men⁽⁵⁾. The current study demonstrated that almost two thirds of the contraceptive users (59.5%) were using contraceptive pills which were the commonest mean of contraception among the studied female. The findings of the current study were in agreement with what was found in Kuwait where it was found that Oral contraceptive pills (OCPs) which are available over-the-counter (OTC) in Kuwait constituted the leading method for spacing and limiting children⁽³¹⁾. Also, the findings were in accordance to Canadian females' utilization of contraceptives, where it was reported that oral contraceptives are the dominant mean for family planning⁽⁵⁾.

Moreover, the findings were in accordance with what was found in Riyadh about 20 years ago, where it was pointed out that oral contraceptives were the most common method; where 94.8% of the 1497 women who practiced contraception were using or had used this form of contraception. Sterilization accounted for 0.9% of contraceptive practices, while the intrauterine device was a more common form of contraceptive among the more educated women⁽³²⁾. And in Eastern province of Saudi Arabia, it was found also that oral contraceptives were used for child spacing in 81.2% of the cases⁽³³⁾.

Nevertheless, the findings of the study were in contrast with what was found in a study conducted

among Muslim females in Jordan, where it was found that contraceptive pills were ranked as second preference after IUCD⁽³⁴⁾, and among Pakistani women where using barriers as methods for contraception were the commonest, that could be attributed to the differences in economic status between these communities, because pills are much expensive if compared to the barriers methods. Furthermore, in a study conducted in China, it was pointed out that there are obstacles for utilization of contraceptive pills which were explained by the fear from side effects like weight gain and permanent infertility⁽³⁵⁾. Meanwhile, it was found that one third of the females in the current study (29.1) were using Intrauterine Contraceptive Devices which were more favored by females being a convenient cheap and safe means of contraception.

Also, the study showed that the least method to be used were the counting methods, because this method is not reliable and it might be distressing to the couples. In contrast, in a study conducted in Sub-Saharan Africa it was found that the level of awareness of natural family planning methods was significantly less than awareness for modern methods of contraception. The awareness rate for rhythm method, lactation amenorrhea method and coitus interruptus was 50.7%, 42.1% and 36.1%, respectively⁽³⁶⁾. Age for using contraceptives The current study showed that the least percentage for females who ever used contraceptives was recorded among younger age group (<25 years), which was in accordance with what was found in a study conducted in Nigeria where it was found that only 29% of females <20 years who were ever used contraceptives⁽³⁷⁾, which could be explained by the notion that females at this age group are mainly newly married and keen for getting pregnant. It was evident that the majority (80.4%) of the females in the age group (34-44) had used contraceptives, if compared to only (38.2%) of the females aged less than 25 years who ever used contraceptives.

Duration of utilization of contraceptives:-

It was observed that the shortest duration for continuous use of a contraceptive was recorded among the pill users. In a study conducted in Germany, it was found the most likely mean of contraceptives to be switched were the contraceptive pills and the most frequent categories of reasons for switching were observed side effects and personal reasons. Desire to get pregnant was the number one single reason, followed by headache/migraine, and bleeding problems⁽³⁸⁾.

Contraception through Various Life Stages

While the current study demonstrated the only (38.2%) of the females aged less than 25 years ever used contraceptives, and the percentage of those using

contraceptives are consistently increasing towards older age groups, the review of literature showed that the pattern of using contraceptives through various life stages in western countries is slightly different in among younger age groups. In a study conducted in Canada, it was shown that Contraception use at sexual debut among women in the 15 to 17 age group is quite high⁽⁶⁾. These observed differences in the utilization of contraceptives through various life stages could be explained by the variation in sexual life rituals between the communities. The majority of the sexual life styles experienced in young age groups in the western countries are usually outside the marriage rules which are emphasized in Islamic countries, where extramarital sexual life is prohibited.

Reasons for not using contraceptives: -

The decision to use one contraceptive method over another is influenced by personal choice, perceptions of efficacy, personal risk, access, age, cost, gender, education, ethnicity, marital status, current number of children, sexual orientation, pattern of sexual activity and level of co-operation between partners. But since men are the dominant decision makers in most instances including the reproductive decisions in the eastern countries, the current study showed that the 12.8% of females who were not utilizing contraceptives pointed out that the reasons were related to the husband, this was in accordance to what was found in a study conducted in India where it was cited that almost two thirds of males had positive views about their role in family planning⁽⁵⁾.

Conclusion:

The table showed that the selected women in the study group were representative of the attendants to the OBS & GYNE department in King Abdul Aziz University hospital, the Saudi women constituted (61.6%), and the great majority were literate (93.9%) and they were mainly having higher graduations. Meanwhile, it was remarked that the majority of them were jobless. Almost two thirds 237 (59.4%) had experienced the utilization of contraceptives which were mostly the oral contraceptive pills followed by IUCD, these findings were in accordance to what was found in most of the countries worldwide and also it is similar to the pattern of contraceptive use in Saudi Arabia twenty years ago. The percentage of contraceptives' users was significantly higher among women in the age group 35-<45 which was attributed to the notion that the females at this age are usually have enough number of children and not thinking to have more. As expected the longer duration for using contraceptives was recorded for the IUCD. Although the majority of the women who never used contraceptives indicated that the abstention was their own decision, nevertheless, it was found that among

12.8% of the women who were not using contraceptives they attributed the decision for their husbands. Interestingly, it was found that the great majority of the selected women (85.8%) were planning to use contraceptives in the future.

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