

#### ORIGINAL ARTICLE

# Gender Difference in Knowledge, Attitudes and Practices towards Family Planning among Married Adults Attending Primary Health Care Centers in The Kingdom of Bahrain: Cross Sectional Study

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#### **Abstract**

**Objective:** Family planning (FP) has become a fundamental part of healthcare and it can be achieved effectively by safe methods. This study was conducted to determine the gender difference in the knowledge, attitudes, and practices towards FP among married adults attending primary healthcare centers (PHCs) in Bahrain.

**Methods:** This cross-sectional study was conducted at five PHCs from the four governorates in Bahrain over two weeks period in May 2021. A self-administered questionnaire was used to evaluate the knowledge, practice, and attitude of married adults towards FP.

**Results:** The study included 1221 participants (705 females and 516 males). Our study showed that 83.6% of the population had heard of Family Planning Methods (FPM) in general. However, female participants heard more about FPM than males. The FPM practice revealed that 71.9% of the participants are using at least one method. The most common methods are withdrawal (42.4%), and male condoms (29.9%). However, 42.5% of participants still have fears about using FPM. The majority of these fears were related to side effects (57.7%).

**Conclusions:** The study revealed that the level of knowledge, attitude and FP utilization in both sexes was lower compared to other studies. In order to improve the public's practice of FP, more investment should be made in health promotion programs.

Keywords: Knowledge, Attitudes, Practices, Family Planning, Gender Difference, Bahrain.

#### Introduction

Family planning (FP) has become a fundamental part of women's healthcare and it can be achieved by using effective and safe methods.<sup>1</sup>

The World Health Organization (WHO) defined FP as "the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births.

It is achieved through using contraceptive methods and the treatment of involuntary infertility".<sup>2</sup> Spacing between pregnancies has a direct impact on the women's health and wellbeing, in addition to the outcome of each pregnancy.<sup>2</sup>

The practice of FP is crucial for protecting maternal and child health. It reduces the rates of unintended births, and induced abortions. In addition, it promotes a woman's sense of autonomy and increases her ability to make decisions in other aspects of her life. Moreover, by enhancing greater wealth accumulation and greater levels of education, it can reduce poverty and improve economic stability for families, households, and communities.<sup>3,4</sup>

Several studies have shown that a large number of people are aware of FP. A Nigerian study found that most women are familiar with FP, while only 9.1% are not.<sup>4</sup> A study in Pakistan showed that the majority of women knew about some modern contraceptive methods as well.<sup>5</sup> However, a study conducted in southern Jordan demonstrated that the concept of FP was not understood by all.<sup>3</sup>

A study conducted in Bahrain in 1995 found that over 99% of married women under the age of 50 were aware of at least one contraceptive method, and 85% of married women have tried it. The traditional methods were used the most (43%).

Regarding Family Planning Method (FPM) use, studies across Indian states show that the number of people using modern contraceptive methods has increased, and more people are gaining access to them.<sup>7</sup> In Sudan, it was found that modern contraceptive methods were used at a high rate (more than 90%), in contrast to the traditional FPMs.<sup>8</sup>

Despite being aware of different approaches for FP, fear of side-effects was the biggest deterrent to using FPMs,<sup>4</sup> followed by the perception that it is a woman's duty and lack of finances.<sup>9</sup> Moreover, religious beliefs, spouse's refusal, fertility issues, lack of proper access to quality services and low levels of education have all been highlighted as factors influencing the use of contraceptive methods in Africa, Asia, and other parts of the world.<sup>1, 3, 5, 8, 10, 11, 12, 13</sup>

Throughout man's history, the greatest focus was on the female half of a relationship neglecting any research made regarding the male. The role of the husband has recently gained attention as an important determinant in the FP decisionmaking process.<sup>14</sup> According to Allen et al. (2014), men's role in FP involves making the decision on contraceptive practice<sup>15</sup>, but in developing countries, male participation is less common. 16,17 Therefore men should be involved in FP programs.<sup>17</sup> According to a study conducted in Nigeria, male respondents were familiar with some contraceptive methods, especially modern contraceptives.<sup>18</sup> Research in Malawi suggested that targeting men for FP interventions may significantly increase contraceptive uptake<sup>19</sup>, especially the use of modern contraceptives instead of traditional methods.<sup>20</sup>

The purpose of this study was to compare the prevalence, knowledge, and attitudes of FP practices between married women and men. Studying both sexes' attitudes and practices will provide a broader perspective covering all possible outcomes and information. The study also aimed to identify the barriers hindering FP uptake and utilization. Getting to know these differences and barriers may assist policymakers in designing effective interventions to reinforce the FP uptake in Bahrain. Our study aimed to be more comprehensive and unique by including both sexes and a large sample size. The findings of this study will provide more valuable information to the community regarding FP statistics in Bahrain.

#### Aim

To assess the general knowledge, attitude and practice of FP in Bahrain.

#### **Objectives**

- 1. To estimate the prevalence of different types of FP practices among married women and men in the Kingdom of Bahrain.
- 2. To determine the knowledge and attitude of FP practice among married women and men in the Kingdom of Bahrain.
- 3. To identify the sources of information about FP among women and men in the Kingdom of Bahrain.

4. To study the barriers to FP practice among married women and men in the Kingdom of Bahrain.

#### Method

Study design: Cross sectional study

**Setting:** Primary Health Care Centers (PHCCs) in the Kingdom of Bahrain

# Study population

Married women and men who were 15-50 years old attending the PHCCs in the kingdom of Bahrain during the study period (2-13 May 2021)

# Sample size

Formula for cross-sectional studies was used to estimate the sample size:

$$n=Np(-p)/[(d2/Z21-\alpha/2*(N-1)+p(1-P)]$$

whereas N is the estimated population size attending the selected Health Centre for morning clinics from Sunday to Thursday, a hypothesized proportion (p) of 0.5 and a margin of error (d) of 0.05, the minimal sample size required ranged from x to y, see table 1 (95% confidence level) to (99% confidence level). The final sample size is 600 candidates for each sex, so the total sample size was 1200 candidates.

# Criteria for inclusion and exclusion

The inclusion criteria were married men and women attending general clinics in the PHCs in the Kingdom of Bahrain, in the age group of 15-50 years old, and who can complete the questionnaire in Arabic or English languages.

The exclusion criteria were single, divorced, widowed or illiterate.

# Data collection instruments and variables (questionnaire)

A self-administered questionnaire containing 18 questions was used to conduct the study. It was developed by combining three previously validated questionnaires, however Chronbach's alpha was not mentioned in the adopted papers. Consent was obtained from each research author to use their questionnaire. The final questionnaire was evaluated by an expert in the field of FP and research and his opinion and inputs were considered.

The following items were included in the questionnaire; demographic data: age, sex, duration of marriage, educational level, occupation, and religion. In addition, it included questions about knowledge, attitude, and practice towards FPMs.

The questionnaire was written in two languages, Arabic and English. Each questionnaire was translated back to the other language by an official translation office, to ensure the consistency of both contents.

A primary pilot study was conducted using the Arabic version of the questionnaire and distributed to a group of participants (5 participants in a health center) to study their understanding of the questions. Some modifications were added to the questionnaire after the pilot study.

# Sampling technique and data collection procedure

Five PHCCF were chosen from the four governorates in the kingdom of Bahrain to recruit the study sample. The selection of these healthcare centers was based on choosing the healthcare centers with the largest population coverage in each governorate. The selected health centers were Muharraq Health Center from the Muharraq governorate, Naim Health center from the capital governorate, Mohamed Jasim Kanoo Health Center from the northern governorate, Yousif Abdulrahman Engineer Health Center, and Hamad Kanoo Health Center from the southern governorate. However, due to the low number of visitors to Naim health center during the study period, more subjects were chosen from Jidhafs health center in the same governorate, which has a large population coverage. As the sample calculated was 1200, the aim was to recruit 240 from each health center and 120 from each sex.

The total number of participants in this study was 1221 (57.7% female and 42.3% male). A considerable number of questionnaires were rejected, and individuals who refused to answer were not counted. Many incomplete questionnaires were excluded. resulting in a total sample size of 1221.

Participants were recruited conveniently from the reception area by approaching all the attendees who were registered at a specific time and fulfilled the inclusion criteria. We provided a short overview of the study to the candidates and obtained their verbal and written consents. The questionnaires were given to those who agreed to participate and were collected back directly. Each questionnaire was inserted into a sealed envelope and dropped in a box to maintain anonymity.

# Data management and analysis plan

A database was created in SPSS-26 with all variables labeled, and then data was entered into SPSS-26 and double entered 10% of responses to check for accurate data entry. We ran frequency checks for each variable to check if there were any problems with the data, such as missing values, which were documented. We undertook descriptive analysis and reported numbers and percentages of responses to each variable. We carried out a Chisquare analysis to explore potential differences in responses between men and women (P value < 0.05 was considered significant).

# Ethical consideration and confidentiality

The information shared by the participants was kept confidential and no intrusive questions were asked. Moreover, we obtained written consent from the authors of the primary studies to use their questionnaires and from the participants to get enrolled in the study. In addition, we had approval from the Primary Care Research Committee in the Ministry of Health to conduct the study in the health centers.

# Results

The study sample size was 1221 participants (57.7% female and 42.3% male). A large number of questionnaires were rejected and refused to be answered. We excluded many incomplete questionnaires. Of the 1218 Participants, 39.9% were between the ages of 31 and 40 years. Of the 1201 respondents, 62.1% had been married for less than 10 years. Among the participants, 54.2% were university graduates, while 49.7% females were unemployed, and 25.2% males were self-employed. Out of 1216 participants 90% were Muslims.

**Table 1: Demographical Characteristics by Gender** 

	ographical Characteristics by Gender Total Male Female					
	n=1221	n=516	n=705			
	N (%)	N (%)	N (%)			
Age						
≤ 30	463 (38)	160 (31.1)	303 (43)			
31 - 40	486 (39.9)	221 (43)	265 (37.6)			
41 - 50	269 (22.1)	133 (25.9)	136 (19.3)			
Total	1218 (100)*	514 (100)	704 (100)			
Duration of m	arriage					
≤ 10	746 (62.1)	329 (64.5)	417 (60.3)			
11 - 20	325 (27.1)	136 (26.7)	189 (27.4)			
>20	130 (10.8)	45 (8.8)	85 (12.3)			
Total	1201 (100)*	510 (100)	691 (100)			
Educational level						
Secondary or below	480 (39.5)	213 (41.5)	267 (38)			
University	659 (54.2)	262 (51.1)	397 (56.5)			
Higher Education	77 (6.3)	38 (7.4)	39 (5.5)			
Total	1216 (100)*	513 (100)	703 (100)			
Current occupation						
Unemployed	368 (30.9)	28 (5.5)	340 (49.7)			
Self Employed	195 (16.4)	128 (25.2)	67 (9.8)			
Healthcare Worker	134 (11.3)	25 (4.9)	109 (15.9)			
Other professions	494 (41.5)	326 (64.3)	168 (24.6)			
Total	1191 (100)*	507 (100)	684 (100)			
Religion						
Muslim	1101 (90.5)	475 (92.2)	626 (89.3)			
Non-Muslim	115 (9.5)	40 (7.8)	75 (10.7)			
Total	1216 (100)*	515 (100)	701 (100)			

<sup>\*</sup>missing values

Table 2 shows the participants' ideal number of children and their FP status. Of the 931 respondents 64% desired to have between 3-4 children, and the preference was equally shared by males and females. Eighty four per cent of 1221 respondents had children. Out of 1031 respondents, 863 (83.7%) answered the question about the number of children they have, there was no significant difference between males and females, 29.5% had 2 children. The majority of respondents had their first child

between 21-30 years of age, and the preference was similar in both sexes. Of the 1031 respondents, 77.8% males and 76.8% females had planned their first pregnancy (p = 0.700). Significantly, of the 1028 respondents 44% males and 54.1% females had unplanned pregnancy (p = 0.001). Of the 523 unplanned pregnancy 64.2% had one planned pregnancy which was equally stated by males (63.2%) and females (64.9%) (p = 0.08).

Table 2: Participants present and future FP intentions

	<b>Total n=1221</b>	<b>Male n=516</b>	Female n=705	Dwalma	
	N (%)	N (%)	N (%)	<i>P</i> -value	
Ideal number of children	1				
≤2	267 (28.7)	97 (26.5)	170 (30.1)		
3 - 4	596 (64)	238 (65)	358 (63.4)	0.220	
≥5	68 (7.3)	31 (8.5)	37 (6.5)	0.330	
Total	931 (100)*	366 (100)	565 (100)		
Have children					
Yes	1031 (84.4)	428 (82.9)	603 (85.5)		
No	190 (15.6)	88 (17.1)	102 (14.5)	0.218	
Total	1221 (100)	516 (100)	705 (100)		
Number of children					
One child	235 (27.2)	95 (26.6)	140 (27.7)		
Two children	255 (29.5)	105 (29.4)	150 (29.6)		
Three children	176 (20.4)	67 (18.8)	109 (21.5)	0.495	
≥4 children	197 (22.8)	90 (25.2)	107 (21.1)		
Total	863 (100)*	357 (100)	506 (100)		
Age at first child in years	5				
≤ 20	141 (13.7)	17 (4)	124 (20.6)		
21-30	743 (72.1)	309 (72.2)	434 (72.1)	< 0.001	
>30	146 (14.2)	102 (23.8)	44 (7.3)	<0.001	
Total	$1030 (100)^*$	428 (100)	602 (100)		
Planned for first child					
Yes	796 (77.2)	333 (77.8)	463 (76.8)		
No	235 (22.8)	95 (22.2)	140 (23.2)	0.700	
Total	1031 (100)	428 (100)	603 (100)		
Have unexpected pregna	ıncies				
Yes	513 (49.9)	187 (44)	326 (54.1)		
No	515 (50.1)	238 (56)	277 (45.9)	0.001	
Total	1028 (100)*	425 (100)	603 (100)		
Number of unplanned p	regnancies				
One time	336 (64.2)	120 (63.2)	216 (64.9)		
Two times	120 (22.9)	38 (20)	82 (24.6)	0.083	
≥3 times	67 (12.8)	32 (16.8)	35 (10.5)	0.083	
Total	523 (100)	190 (100)	333 (100)		

<sup>\*</sup>missing values

Table 3 shows the results of the awareness of FPMs and source of information by respondents. The majority of respondents were familiar with FP (83.6%). Significantly, males heard less than females (80.9%, 85.6% respectively), p = 0.031. The most common methods participants knew of were oral contraceptives (69.5%), male condoms (64.9%), and withdrawal (52.4%).

In general, males knew more about male condom, OCP, withdrawal, IUCD, breast feeding and safe period than the other methods. Females knew more about OCP, male condom, IUCD, withdrawal,

breast feeding and safe period. Males heard more about male condoms comparing to females (69.2%, 61.8% respectively), p value = 0.012, while Females knew more about OCPs than males (77.8%, 62.3% respectively), p value <0.001. Although, social media was the main source of information (46.6%), significantly health care workers were the next best source male to female ratio (28.8%, 35.9% respectively), p value = 0.027, followed by Radio/ TV, workplace and finally family and the preference was similar in both sexes.

Table 3: Family planning awareness and source of information by respondents

	<b>Total n=1221</b>	<b>Male n=516</b>	Female n=705	<i>P</i> -value
	N (%)	N (%)	N (%)	P-value
Heard about family planning				
Yes	1016 (83.6)	416 (80.9)	599 (85.6)	
No	199 (16.4)	98 (19.1)	101 (14.4)	0.031
Total	$1215 (100)^*$	514 (100)	700 (100)	
Methods of family planning heard about				
OCP	706 (69.5)	259 (62.3)	446 (77.8)	< 0.001
Male condom	659 (64.9)	288 (69.2)	370 (61.8)	0.012
Withdrawal	532 (52.4)	217 (52.2)	314 (52.4)	0.927
IUCD	505 (49.7)	167 (40.1)	338 (56.4)	< 0.001
Breast feeding	407 (40.1)	121 (29.1)	286 (47.7)	< 0.001
Safe period	368 (36.2)	117 (28.1)	250 (41.7)	< 0.001
Injection	332 (32.7)	91 (21.9)	241 (40.2)	< 0.001
Male sterilization	267 (26.3)	87 (20.9)	180 (30.1)	0.001
Female sterilization	255 (25.1)	86 (20.7)	169 (28.2)	0.006
Female condom	251 (24.7)	93 (22.4)	158 (26.4)	0.148
Diaphragm/foam/jelly	152 (15)	59 (14.2)	93 (15.5)	0.563
Source of information				
Social media	473 (46.6)	197 (47.4)	275 (45.9)	0.504
Clinic/Health worker	335 (33)	120 (28.8)	215 (35.9)	0.027
Friend	257 (25.3)	98 (23.6)	159 (26.5)	0.338
Radio/TV	209 (20.6)	104 (25)	105 (17.5)	0.003
Other sources	80 (7.9)	26 (6.3)	54 (9)	0.119
Workplace	67 (6.6)	18 (4.3)	49 (8.2)	0.017
Religious places	54 (5.3)	16 (3.8)	38 (6.3)	0.090
Family	37 (3.6)	9 (2.1)	28 (4.7)	0.038

<sup>\*</sup>missing values

Table 4 illustrates the use of FPMs, intention to use them in the future, and fears about FP. Of the 1210 respondents, 823 (68%) have ever used some form of FPM. Withdrawal was the most common unsafe method (48%), followed by male condoms

(41.7%). Males are significantly more likely to use male condoms comparing to female (49%, 36.7% respectively), p value = 0.01. Of the 866 respondents, 623 (71.9%) are still currently using one of FPM. Withdrawal (42.4%) and Male condoms (29.9%)

remained the most popular methods. The majority of participants (61.5%) intend to use FP in the future without differences between both sexes. There were significantly more fears toward FP among females

(45.6%, 38.2% respectively) with a p value of 0.011. The most common fears associated with FPMs were their side effects (57.7%) and irreversible effects (23.4%).

Table 4: Use of family planning methods and fears about family planning by gender

	<b>Total n=1221</b>	Male n=516	Female n=705	<i>P</i> -value	
	N (%)	N (%)	N (%)	<i>P</i> -value	
Family planning methods ever use	ed				
Yes	823 (68)	335 (65.3)	488 (70)		
No	387 (32)	178 (34.7)	209 (30)	0.082	
Total	1210 (100)*	513 (100)	697 (100)		
Methods of family planning used					
Withdrawal	395 (48)	153 (45.7)	242 (49.6)	0.284	
Male condom	343 (41.7)	164 (49)	179 (36.7)	< 0.001	
OCP	213 (25.9)	86 (25.7)	127 (26)	0.955	
Safe period	169 (20.5)	45 (13.4)	124 (25.4)	< 0.001	
Breast feeding	137 (16.6)	40 (11.9)	97 (19.9)	0.003	
IUCD	103 (12.5)	36 (10.7)	67 (13.7)	0.213	
Injection	25 (3)	10 (3)	15 (3.1)	0.948	
Female sterilization	12 (1.5)	1 (0.3)	11 (2.3)	0.033	
Male sterilization	7 (0.9)	2 (0.6)	5 (1)	0.707	
Diaphragm/foam/jelly	4 (0.5)	2 (0.6)	2 (0.4)	1.000	
Female condom	4 (0.5)	2 (0.6)	2 (0.4)	1.000	
Family planning methods current	ly using				
Yes	623 (71.9)	249 (70.7)	374 (72.8)		
No	243 (28.1)	103 (29.3)	140 (27.2)	0.515	
Total	866 (100)	352 (100)	514 (100)		
Methods of family planning using	,				
Withdrawal	264 (42.4)	95 (38.2)	169 (45.2)	0.117	
Male condom	186 (29.9)	98 (39.4)	88 (23.5)	< 0.001	
OCP	108 (17.3)	47 (18.9)	61 (16.3)	0.352	
Safe period	101 (16.2)	30 (12)	71 (19)	0.027	
IUCD	70 (11.2)	24 (9.6)	46 (12.3)	0.339	
Breast feeding	66 (10.6)	18 (7.2)	48 (12.8)	0.033	
Female sterilization	19 (3)	4 (1.6)	15 (4)	0.096	
Injection	7 (1.1)	3 (1.2)	4 (1.1)	1.000	
Male sterilization	6 (1)	0 (0)	6 (1.6)	0.086	
Female condom	5 (0.8)	2 (0.8)	3 (0.8)	1.000	
Diaphragm/foam/jelly	1 (0.2)	0 (0)	1 (0.3)	1.000	
Intend to use family planning met	thods in the future				
Yes	732 (61.5)	315 (62.3)	417 (61)		
No	458 (38.5)	191 (37.7)	267 (39)	0.652	
Total	1190 (100)*	506 (100)	684 (100)		

Fears about family planning				
Yes	508 (42.5)	193 (38.2)	315 (45.6)	
No	688 (57.5)	312 (61.8)	376 (54.4)	0.011
Total	1196 (100)*	505 (100)	691 (100)	
Type of Fears				
Side effects	293 (57.7)	100 (51.8)	193 (61.3)	0.042
Irreversible effects	119 (23.4)	39 (20.2)	80 (25.4)	0.190
My partner objections	67 (13.2)	19 (9.8)	48 (15.2)	0.085
Other reasons	60 (11.8)	23 (11.9)	37 (11.7)	0.940
Against my culture	58 (11.4)	33 (17.1)	25 (7.9)	0.002
Against my religion	43 (8.5)	22 (11.4)	21 (6.7)	0.060

<sup>\*</sup>missing values

(Table 5) presents the Knowledge about FP. The majority of respondents (57.5%) claimed adequate knowledge, and the results are similar for both sexes.

However, more than half of the respondents from both sexes said they still needed more information about FPMs.

Table 5: Knowledge about family planning by gender

	Total n=1221 N (%)	Male n=516 N (%)	Female n=705 N (%)	<i>P</i> -value
Have enough information about family planning				
Yes	694 (57.5)	284 (56)	409 (58.5)	0.387
No	513 (42.5)	223 (44)	290 (41.5)	
Total	1207 (100)*	507 (100)	699 (100)	
Need more information about family planning				
Yes	613 (50.9)	255 (50.3)	357 (51.3)	
No	591 (49.1)	252 (49.7)	339 (48.7)	0.733
Total	1204 (100)*	507 (100)	696 (100)	

<sup>\*</sup>missing values

#### Discussion

A slightly higher percentage of women responded to our study since they comprised the majority of health center attendees. Of the couples we studied 64% (63.2% males and 64.9% females) experienced at least one unplanned pregnancy, because either they are not using FPM or they rely on unreliable methods like withdrawal (42.4%), which has a high failure rate. A similar result was found in a study done in Pakistan which showed that the majority of women knew about some modern contraceptive methods. Similarly, a 1995 study conducted in Bahrain found that the withdrawal was the most commonly used traditional contraceptive method (43% of prevalence).<sup>6</sup>

Compared with a previous study conducted in Bahrain in 1995<sup>6,</sup> our study showed less knowledge

about FP. More than 99% of married women under 50 were aware of at least one method in the 1995 study. A majority of participants in Nigeria<sup>4</sup> (90.9%) and Jordan<sup>3</sup> (91.3%) heard about FP. Our study showed that 83.6% of currently married participants knew about FPM. The less knowledge can be explained by including both sexes, unlike the other studies that emphasized females only. Additionally, FP is not taught in Bahrain as an important subject in schools as it is in other countries.<sup>21</sup>

The female participants heard more about FP than the male participants (85.6% versus 80.9%), and there was a difference in the most common methods they heard about. This can be attributed to the availability of postnatal services provided by the ministry of health in the PHCs during the postpartum period, in which FP choices are

discussed with the attendees.<sup>22</sup> This increased awareness may also be explained by the fact that pregnancy and childbearing are directly related to a woman's health and wellbeing.<sup>6,21</sup> Neither sexes had reliable information since they relied on social media because it has easy access in compared to other sources.<sup>8,21</sup>

In regards to males' awareness and practices towards FP, the study conducted in Osun State, Nigeria, 18 showed that most male respondents knew about the existence of the contraception methods, more specifically the modern ones. Being the most known contraceptive, awareness of the condom was the highest. Similar results were found in our study, as 80.9% of the male participants knew about FPM, more specifically the modern ones and the most known method was male condoms (69.2%). Male condoms are the most common method because they are practical, accessible, cheap and have fewer side effects in compared to other FPMs. 1, 18, 21

Regarding the usage of FPM, our study found that withdrawal (42.4%), male condoms (29.9%), and OCP (17.3%) were the most common methods. There was a statistically significant difference between the sexes in the use of some FPMs. Male condom use was more prevalent in males for the same reasons as above.

In Sudan, it was shown that 90% of the participants used modern methods<sup>8</sup>. Also, a study done in India in 2015<sup>7</sup>, found that 53.4% of the participants used IUCDs, 38.8% used OCPs, and 7.77% used male condoms. And surprisingly, the most commonly used method was female sterilization 66.6%.

According to the survey conducted in Bahrain in 1995<sup>6</sup>, a higher percentage of married women used a contraceptive at some point, 85% of them used FPM. Our study found that only 71.9% (72.8% women and 70.7% men) use contraception. This could be due to the inclusion criteria of our study which included both sexes in compared to other studies.

The results of the 1995 study showed that withdrawal methods were most commonly used, followed by pills and condoms.<sup>6</sup>

Even though 61.5% of the Participants plan to use FPM in the future, 42.5% have a fear of using FPM. This could be due to participants' concerns over side effects associated with modern methods such as OCPs, IUCDs, injectable methods, and sterilization. Similarly, in Saudi Arabia (Jidda)<sup>1</sup>, Najera<sup>4</sup> and Jordan<sup>3</sup>, the hold back was the possibility of irreversible effects (57.7%) and the potential side effects (23.4%).

# Limitations of the study

Among the strengths of our study are the large sample size and the nearly equal representation of both sexes. Previous studies also provided reliable instruments that were used in our study. Weaknesses in our study are related to some participants' refusal to take part in the study as well as missing data.

#### Recommendation

According to these findings, we encourage higher authorities to invest more in FP awareness-raising campaigns as it is critical to reduce and correct misconceptions about FP, which will in turn improve awareness and attitudes towards it. It is also essential to emphasize the importance of FP, as well as its various forms, both traditional and modern, and their effectiveness.

As part of the campaign, we must make sure that the public understands what FP is, which will help individuals and couples anticipate and achieve their desired number of children and the spacing and timing of their births, which directly affect the woman's health and wellbeing. In addition, involving community leaders, religious clerics, and health workers in these campaigns may help address socio-cultural and religious concerns.

Both sexes heard the most about FP through social media. This result should motivate health care workers to participate in social media campaings to raise awareness about health issues. Further, we should address the concerns about side effects among men and women through effective counseling and providing adequate information about method-related side effects and how to manage them.

Furthermore, we recommend that men should be involved in reproductive health care screenings

and are provided with FPM counseling through male doctors to overcome their shyness. We would also encourage communication between wife and husband regarding birth spacing.

Further research is required to determine the influence of different factors on FP knowledge, attitude, and practice. Additionally, we suggest conducting a study that measures the effect of a sixmonth FP education program on male involvement in FP and the level of improvement in couples' contraceptive practices in the future. Moreover, we recommend using this study as a basis for future audits.

#### Conclusion

The level of knowledge and attitude toward FP in both sexes was relatively lower than previous study conducted in Bahrain in 1995, and the level of FP utilization was also comparatively low in comparison with many studies.

Further research should be conducted to determine the factors influencing FP knowledge, attitude, and practice.

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#### References

1. Alhusain F, Alkaabba F, Alhassan N, et al. Patterns and knowledge of contraceptive methods use among women living in Jeddah, Saudi Arabia. Saudi Journal for Health Sciences [Internet]. 2018;7(2):121. Available from: http://www.saudijhealthsci.org/article. asp?issn=2278-0521;year=2018;volume=7;iss ue=2;spage=121;epage=126;aulast=Alhusain

- 2. Shaw, D., 2010. WHO | The ABC'S Of Family Planning. Who.int. Available at: https://www.who.int/pmnch/media/news/2010/20100322\_d\_shaw\_oped/en/#:~:text=The%20 World%20Health%20Organization%20 definition,the%20treatment%20of%20 involuntary%20infertility.
- 3. Mahadeen A, Khalil A, Hamdan-Mansour A, et al. Knowledge, attitudes and practices towards family planning among women in the rural southern region of Jordan. Eastern Mediterranean Health Journal [Internet]. 2012Jan;18(6):567–72. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22888612
- 4. Esike C, Anozie O, Ani M, et al. Barriers to family planning acceptance in Abakaliki, Nigeria. Tropical Journal of Obstetrics and Gynaecology [Internet]. 2017;34(3):212. Available from: https://www.researchgate.net/publication/321247942\_Barriers\_to\_family\_planning\_acceptance\_in\_Abakaliki\_Nigeria
- 5. Mustafa G, Azmat S, Hameed W, et al. Family Planning Knowledge, Attitudes, and Practices among Married Men and Women in Rural Areas of Pakistan: Findings from a Qualitative Need Assessment Study. International Journal of Reproductive Medicine, [online] 2015, pp.1-8. Available at: https://www.hindawi.com/journals/ijrmed/2015/190520/
- 6. Naseeb Tawfeeq, and Samir M. Farid (2000). Bahrain Family Health Survey 1995: Principal Report. Manama: Ministry of Health
- 7. Samal J. Family Planning Practices, Programmes and Policies in India Including Implants and Injectables with a Special Focus on Jharkhand, India: A Brief Review. JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH. 2015; Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4668441/
- 8. Abdalla AAA, Ahmmed EH. Evaluate Use and Barriers to Accessing Family Planning Services among Reproductive Age Women in the White Nile, Rural Districts, Sudan. Health Science Journal [Internet]. 2017;11(6).

- Available from: http://www.hsj.gr/medicine/evaluate-use-and-barriers-to-accessing-family-planning-services-among-reproductive-age-women-in-the-white-nile-rural-districts-sud.php?aid=21379
- 9. Adelekan A, Omoregie P, Edoni E. Male Involvement in Family Planning: Challenges and Way Forward. International Journal of Population Research. 2014;2014:1-9.
- 10. Albezrah N. Use of modern family planning methods among Saudi women in Taif, KSA. International Journal of Reproduction, Contraception, Obstetrics and Gynecology [Internet]. 2015 [cited 15 January 2022];4(4):990-994. Available from: https://www.ijrcog.org/index.php/ijrcog/article/view/2035
- 11. Lasee A, Becker S. Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya. International Family Planning Perspectives [Internet]. 1997 [cited 15 January 2022];23(1):15. Available from: https://www.guttmacher.org/journals/ipsrh/1997/03/husband-wife-communication-about-family-planning-and-contraceptive-use-kenya
- 12. Aryeetey R, Kotoh AM, Hindin MJ. Knowledge, perceptions and ever use of modern contraception among women in the Ga East District, Ghana. Afr J Reprod Health [Internet]. 2010 [cited 2022 Jan 15];14(4 Spec):26–31. Available from: https://pubmed.ncbi.nlm.nih. gov/21812195/
- 13. Kumar M, Meena J, Sharma S, et al. Contraceptive use among low-income urban married women in India. J Sex Med [Internet]. 2011 [cited 2022 Jan 15];8(2):376–82. Available from: https://pubmed.ncbi.nlm.nih. gov/20946154/
- 14. Tilahun T, Coene G, Temmerman M, et al, 2015. Couple based family planning education: changes in male involvement and contraceptive use among married couples in Jimma Zone, Ethiopia. BMC Public Health, 15(1).

- 15. Allen K, Larissa J, Alice R, et al. Barriers to male involvement in contraceptive uptake and reproductive health services: a qualitative study of men and women's perceptions in two rural districts in Uganda. Reproductive Health. 2014;11:21. doi:10.1186/1742-4755-11-21.
- 16. Ijadunola MY, Abiona TC, Ijadunola KT, et al. Male involvement in family planning decision making in Ile-Ife, Osun State, Nigeria. Afr J Reprod Health. 2010;14(4 Spec no):43–50.
- 17. Sharma A. Male Involvement in Reproductive Health: Women's Perspective. The Journal of Family Welfare. 2003;49(1):1–7.]
- 18. Ijadunola M, Abiona T, Ijadunola K, et al. Male Involvement in Family Planning Decision Making in Ile-Ife, Osun State, Nigeria [Internet]. Ajol.info. 2010. Available from: https://www.ajol.info/index.php/ajrh/article/view/67833
- 19. Shattuck D, Kerner B, Gilles K, et al. Encouraging Contraceptive Uptake by Motivating Men to Communicate About Family Planning: The Malawi Male Motivator Project. Am J Public Health. 2011;101(6):1089–95.
- 20. WHO 2012, From evidence to policy: expanding access to family planning optimizing the health workforce for effective family planning services. Policy brief. http://apps.who.int/iris/bitstream/10665/75164/1/WHO\_RHR\_HRP\_12.19\_eng.pdf. Accessed 15 Aug 2014.
- 21. Akintade O, Pengpid S and Peltze K, 2022. Awareness and use of and barriers to family planning services among female university students in Lesotho. [online] Ajol.info. Available at: <a href="https://www.ajol.info/index.php/sajog/article/view/70538">https://www.ajol.info/index.php/sajog/article/view/70538</a> [Accessed 14 June 2022].
- 22. Health Information Directorate-Web Services Group. Mother and child health and reproductive health ministry of health [Internet]. Gov.bh. [cited 2022 Mar 16]. Available from: https://www.moh.gov.bh/Services/MC?lang=en