Original Article

Predictors of Knowledge and Perception of Family Planning Among Men in Urban Areas in Northwest Nigeria

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Abstract

Introduction: The use of family planning (FP) methods has remained low in Nigeria despite the high fertility rate and unmet need; partly because men are excluded in FP programs. Most studies on FP were carried out among married women and information about men was acquired from their wives. Unfortunately, such information may not be accurate. **Aims:** The study aimed to determine the predictors of FP knowledge and perception among men in urban areas in the Northwestern part of Nigeria. **Subjects and Methods:** The study was cross-sectional in design, carried out in urban areas in Northwest Nigeria among 167 married men in November 2017 enrolled through a multi-stage sampling technique. Data collection was done with a structured questionnaire which was interviewer-administered. SPSS version 23 was used to analyze the data. **Results:** The majority (75, 45.5%) had poor knowledge of FP and 118 (71.5%) had a positive perception of FP. Social class (adjusted odds ratio [aOR]: 15.75, 95% confidence interval [CI] = 2.14–116.03) and perception (aOR: 0.13, 95% CI = 0.03–0.59) were the predictors of good FP knowledge while knowledge (aOR = 0.10, CI: 0.02–0.51) predicted positive perception on FP. **Conclusion:** Knowledge of FP was poor; the perception of the majority was positive. There is a need by the Sokoto State Government, Local Government Areas, and religious leaders to increase information on FP**,** especially on the benefits and methods, and the need for males to participate in FP through the enlightenment of the public using the media, schools, and worship places.

Keywords: Family planning, knowledge, men, northwest, perception, urban areas

Introduction

Nigeria's family planning (FP) program was launched many years ago, yet it has one of the lowest contraceptive prevalence rates (CPR) in Africa which was 17% in 2018.[1] As such, the country's fertility rate has remained high which as of 2018 was 5.3 births per woman with the Northwestern part of the country and Sokoto State, both having a total fertility rate of 7.0 which were the highest in the country.[1] Sokoto State has one of the lowest CPR in the country (2.1%) as of 2018.[1]

Several reasons have been put forward to explain the low acceptance and utilization of FP methods despite the high fertility rate;[2] these include religion, poor accessibility to services, cultural barriers such as patriarchy, and a lack of male involvement in FP.[2,3] Other reasons are lack of awareness of the types, benefits, and side effects of FP methods, misperceptions about unwanted and desired effects among a majority of the adult population, and a lack of understanding of the health and economic advantages of using FP methods among families or even providers.[4]

Nigeria's CPR target for modern contraceptive methods was fixed at 27% to be achieved by 2020.[1] About 31,000 women and 1.5 million children's deaths will be prevented and more than 70,000 maternal illnesses and disabilities will be averted.[5] The World Health Organization (WHO) estimated that 303,000 women died as a result of pregnancy or childbirth in 2015; Sub-Sahara Africa accounting for 66%

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of such deaths.[6] The maternal mortality ratio of Nigeria ranks highest and second highest in Sub-Saharan Africa and the world, respectively,[7] with maternal deaths being responsible for 31% of all deaths among women of reproductive age.[1]

A study done in Olorunda Local Government Area (LGA) of Osun state revealed that only 57.0% of the respondents had good knowledge of FP and 69.8% of the respondents' perception of FP was positive. More than half (54.8%) of the respondents were of the perception that attending FP clinic is the woman's responsibility.[8] Another study done in the urban and rural areas of Anambra State showed that 90.7% and 90.2% of urban and rural men, respectively, disagreed that FP is the responsibility of the woman.[9] A research carried out in Ile-Ife showed that perception of FP was not influenced by the respondents' age but religion, type of marriage, educational level, and men's occupation influenced their perception of FP.[2] In a study done in Southern Ethiopia, there was no association between knowledge of FP and the age, religion, or ethnicity of the respondents. However, those with formal education had a higher knowledge of FP methods.[10]

Although FP methods and services are mostly directed at women, men are usually the ones who decide on the size of the family and whether their spouse uses a FP method or not.[8] The attitudes of women toward the use of modern FP methods are strongly related to their husband's level of knowledge, perceptions, and FP method use.[2,10,11] Nonetheless, the roles men play have been ignored by FP programs in the past with the attention solely on women, and FP services are being offered at maternal and child health clinics.[2,12,13]

Many surveys done on FP had married women as their respondents and information about men was obtained from their wives.[2,3,11] Unfortunately, such information may not give the true picture and as such, no significant achievement has been made in improving the CPR by FP programs founded on such information.[2,3,11] Consequently, it is necessary to assess men's knowledge, perceptions, as well as their predictors by directly interviewing them. Furthermore, most studies done on this topic among men were in the Southern part of the country; there is need for a research to be done in Northern Nigeria due to differences in culture and religion between the two regions.

This study assessed men's knowledge and perception of FP as well as determined their predictors in urban areas in North-western Nigeria.

Subjects and Methods

Study area, design, and population

Wamakko, part of Dange-Shuni, Sokoto South, and Sokoto North LGAs make up Sokoto metropolis. The inhabitants are mainly Hausa and Fulani by tribe, and Muslims by religion.

The study was cross-sectional in design and was done among married men in Sokoto Metropolis in November 2017. Men with wives within the reproductive age group (15–49 years) were included. In instances, where a man has more than one wife, the questions were asked about the most senior wife if she was within the reproductive age group. Men who have been married for <1 year were excluded because most couples are eager to have a child within the 1st year of marriage and only consider contraception after the first child is born. FP services are provided by both the public and private facilities; there are a total of 746 facilities providing FP services in Sokoto State.[14]

Sample size estimation and sampling technique

The sample size determined was 150 using the formula for estimating sample size in cross-sectional studies $n=\frac{z^2 pq}{d^2}$, (where: n = required sample size, z = standard normal deviate at required confidence level of 95% = 1.96, P = proportion [89.0% = 0.89], q = complementary probability of P [1−0.89] = 0.11 and d = precision or tolerable margin of error is set at 0.05)[15] and a proportion of 89.0% men who approved of their spouses using FP in a previous study.[16] In anticipation of a 10% non-response rate, the sample size was upgraded to 167 (150 × 90% = 167) and a multi-stage sampling technique consisting of four stages was used to select the respondents. In Stage 1, Sokoto south and Wamakko LGAs were selected from the four LGAs in Sokoto metropolis using a simple random sampling technique by balloting. While in Stage 2, two wards were selected from each of the selected LGA by simple random sampling. Gagi B and Tudun Wada B from Sokoto south; Arkilla and Bado from Wamakko were the selected wards. In Stage 3, one settlement was selected from each of the 4 wards by simple random sampling technique. Gagi Rugga, Unguwar Rogo 'Yan Kaji, Guiwa Lowcost, and Bado COE were the selected settlements. 40, 59, 51, and 28 were proportionately allocated to the 4 selected settlements, respectively. While in Stage 4, systematic random sampling was used to enroll households to obtain the study subjects after obtaining the sampling frame.

Data collection and analysis

A structured interviewer-administered questionnaire adapted from previous studies was used to obtain information on the study objectives.[2,4,12,13,17-19] The questionnaire was pretested by the principal researcher and six research assistants in Sokoto North LGA after the conclusion of the training of the research assistants who were medical students of Usmanu Danfodiyo University Sokoto. Adjustments were made on the observations that were noted.

Respondents' knowledge was scored and graded on a 26-point scale. Each correct response was scored "1" while wrong and no responses were scored "0." These were converted to percentages and graded into ≥60% = good knowledge, 50%–59% = fair knowledge and 0%–49% = poor knowledge. Respondents' perception of FP was scored and graded on a 13-point scale. Each correct response was scored "1" while wrong and no responses were scored "0." These were converted to percentages and graded into ≥60% = positive perception and <60% = negative perception.[8] Oyedeji's method was used to determine the social class (SC) of the couple using

the occupation and educational level of the respondents and their wives.[20]

The 23rd version of IBM SPSS (IBM Corp, Armonk, New York; 2015) was used to process the data. Pearson and Fisher's exact Chi-square tests were used for bivariate analysis involving categorical variables, while the predictors of knowledge and perception of FP were determined by binary logistic regression analysis. Statistical significance was set at $P < 0.05$.

Ethical consideration

The Sokoto State Ministry of Health Ethics Review Committee granted the Ethical clearance, permission was obtained from the LGA and traditional ruler of each settlement while each of the participants gave written informed consent.

Results

Sociodemographic profile of the respondents

One hundred and sixty-five out of the 167 questionnaires administered were adequately filled and used for analysis, giving a response rate of 98.8%.

Respondents in the age group of 35–44 years formed the highest proportion, 63(38.2%); the mean age was 39.4 ± 8.8 years. Majority, 149 (90.3%) were Hausa, Muslim 158 (95.8%) and civil servants 69 (41.8%). More than half had tertiary education 88 (53.3%) [Table 1]. A higher proportion of the wives, 74 (44.8%) were in the age group of 25–34 years, 61 (37%) had only Qur'anic education and 102 (61.8%) were unemployed. The majority of the couple, 49 (29.7) were in SC IV [Table 2].

Table 1: Sociodemographic characteristics of the respondents (*n*=165)

Variables	Frequency, *n* (%)
Age (years)	
25-34	57 (34.5)
35-44	63 (38.2)
45-54	34 (20.6)
≥55	11 (6.7)
Tribe	
Hausa	149 (90.3)
Igbo	5 (3.0)
Yoruba	7 (4.3)
Others (e.g., Fulani, Egbira)	4 (2.4)
Religion	
Islam	158 (95.8)
Christianity	7 (4.2)
Occupation	
Trader	54 (32.7)
Farmer	12 (7.3)
Artisan	19 (11.5)
Students	2 (1.2)
Civil servant	69 (41.8)
Others (e.g., gateman, bike rider)	9 (5.5)
Educational level	
Quranic	30 (18.2)
Primary	12 (7.3)
Secondary	35 (21.2)
Tertiary	88 (53.3)
Type of marriage	
Monogamous	111 (67.3)
Polygamous	54 (32.7)
Number of children	
≤4	87 (52.7)
>4	78 (47.3)

Knowledge of family planning of the respondents

A higher proportion of the respondents, 147 (89.1%) knew FP is for child spacing compared with 125 (75.8%) who knew FP is for achieving the desired number of children. A smaller proportion of the respondents knew that FP prevents abortion 66 (40.0%) and sexually transmitted infections (STIs) 79 (47.9%). Menstrual irregularities were known by the majority 106 (64.2%) as side effects of contraceptive methods. The male condom was the commonest method of FP known by the respondents 149 (90.3%). The least known methods were the intrauterine contraceptive device (IUCD) and lactational amenorrhea (41, 24.8%). The majority (45.5%) had poor knowledge of FP [Table 3].

Perception of family planning of the respondents

The majority, 133 (80.6%) were of the opinion that FP is not for the women alone, 41 (24.8%) think that only the husband should decide on whether to use FP or not and 68 (41.2%) thought that a couple should not decide on the family size. Twenty- five (15.2%) said that FP is a sinful act [Table 4]. The majority of the respondents, 118 (71.5%) had a positive perception of FP [Figure 1].

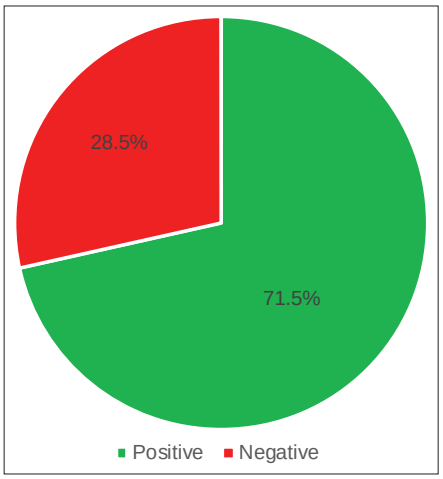

Figure 1: Perception grade of the respondents

Factors associated with knowledge and perception of family planning

Good knowledge of FP was significantly associated with the respondents' and their wives' occupation and educational level, type of marriage, social class, and perception grade [Table 5]. Positive perception of FP was significantly associated with the respondents' and their wives' occupation

Table 2: Sociodemographic characteristics of the respondents and their wives (n=165)

Variables	Frequency, *n* (%)
Age of wife (years)	
15-24	54 (32.7)
25-34	74 (44.8)
≥35	37 (22.4)
Wife's educational level	
Quranic	61 (37.0)
Primary	8 (4.8)
Secondary	53 (32.1)
Tertiary	43 (26.1)
Wife's occupation	
Unemployed	102 (61.8)
Trader	32 (19.4)
Artisan	2 (1.2)
Students	3 (1.8)
Civil servant	24 (14.5)
Others (e.g., nanny, baker)	2 (1.2)
SC of the couple	
SC I	11 (6.7)
SC II	26 (15.8)
SC III	45 (27.3)
SC IV	49 (29.7)
SC V	34 (20.6)

SC I: Senior public servants, professionals, managers, large scale traders, businessmen, and contractors who have university degrees or equivalents[20]. SC II: Intermediate grade public servants, and senior school teachers who have school certificate and teaching or other professional training[20]. SC III: Junior school teachers, drivers, and artisans with school certificate or grade II teachers' certificate holders or equivalents[20]. SC IV: Petty traders, labourers, messengers, and similar grades with those who have junior school certificate and primary six certificates[20]. SC V: Unemployed, full-time housewives, students, and subsistence farmers who could either just read and write or were illiterate.[20] SC: Social class

Table 3: Knowledge of the definition, benefits, side effects, methods of family planning, and knowledge grade of the respondents (*n*=165)

Variable	Frequency, *n* (%)
Definition of FP known*	
FP is for achieving the desired number of children	125 (75.8)
FP is for child spacing	147 (89.1)
Benefits of FP known*	
Spacing of births	138 (83.6)
Limiting the number of births	133 (80.6)
Improving the child's health	113 (68.5)
Prevention of unwanted pregnancy	108 (65.5)
Prevention of maternal deaths	98 (59.4)
Prevention of STIs	79 (47.9)
Prevention of abortion	66 (40.0)
Others (e.g., improving the standard of living)	10 (6.1)
Side effects of contraceptive methods known*	
Menstrual irregularities/irregular bleeding	106 (64.2)
Weight gain	78 (47.3)
Hypertension	34 (20.6)
Breast cancer	23 (13.9)
Others (e.g., delay in the return of fertility, body weakness)	3 (1.8)
Method of FP known*	
Male condom	149 (90.3)
Injectables	129 (78.2)
Pills	127 (77.0)
Withdrawal	118 (71.5)
Implants	102 (61.8)
Female sterilization	92 (55.8)
Female condom	70 (42.4)
Emergency contraception	49 (29.7)
Periodic abstinence	49 (29.7)
Male sterilization	43 (26.1)
Safe period	59 (25.8)
Lactational amenorrhoea	41 (24.8)
IUCD	41 (24.8)
Other (e.g., rhythm)	1 (0.6)
Knowledge grade	
Poor	75 (45.5)
Fair	29 (17.5)
Good	52 (37.0)

*Multiple responses. FP: Family planning, STI: Sexually transmitted infections, IUCD: Intra-uterine contraceptive device

and level of education, social class, and knowledge of FP [Table 6].

In binary logistic regression, social class and perception grade were shown to be the predictors of good knowledge of FP. Those in the upper (adjusted Odds Ratio [aOR]= 15.7, CI: 2.14-116.0) and middle (aOR= 6.9, CI: 1.21-39.8) social classes were about 16 times and 7 times more likely respectively to have a good knowledge of FP compared to those in lower social classes. Those with a negative perception (aOR= 0.13, CI: 0.03- 0.59) were about 8 times less likely to have a good knowledge of FP than those with positive perception [Table 7]. Binary logistic regression showed only knowledge grade to be the predictor of positive perception of FP. Those with poor knowledge of FP [aOR= 0.10, CI: 0.02-0.51] were about 10 times less likely to have a positive perception of FP than those with good knowledge of FP [Table 7].

Discussion

This study made an assessment of FP knowledge and perception as well as their predictors amongst men in urban areas in Northwest Nigeria.

The majority of the respondents knew the definitions of FP as achieving the desired number of children and child spacing which are supported by the findings of the studies done in Osun and Anambra States.[8,9] This is encouraging as a prerequisite for the use of a contraceptive method is knowing what FP is. When people are knowledgeable about FP, it is anticipated that they will utilize FP methods. It is noteworthy that a higher proportion of the respondents knew FP is for spacing births than limiting

Table 4: Perception of the respondents on family planning (*n*=165)

Variable	Frequency, *n* (%)
Family planning is beneficial	
Yes	152 (92.1)
No	13 (7.9)
Approve your wife to use a FP method	
Yes	135 (81.8)
No	30 (18.2)
Family planning is a woman's issue alone	
Yes	32 (19.4)
No	133 (80.6)
Men too can use a family planning method	
Yes	106 (64.2)
No	59 (35.8)
Who do you think should decide on whether to use FP or not	
Husband only	41 (24.8)
Wife only	4 (2.4)
Both husband and wife	120 (72.7)
Who do you think should decide on the method of FP to adopt	
Husband only	38 (23.0)
Wife only	6 (3.6)
Both husband and wife	121 (73.3)
Men should accompany their wives to the FP clinic	
Yes	128 (77.6)
No	37 (22.4)
A couple should make a decision on the number of children they want to have	
Yes	97 (58.8)
No	68 (41.2)
Who do you think should decide on the number of children to have (*n*=97)	
Husband only	10 (10.3)
Wife only	0 (0)
Both husband and wife	87 (89.7)
A couple should have as many children as they want	
Yes	99 (60.0)
No	66 (40.0)
It is wrong for women to use FP without their husbands' consent	
Yes	135 (81.8)
No	30 (18.2)
Family planning is a sinful act	
Yes	25 (15.2)
No	140 (84.8)
Would recommend FP to others	
Yes	122 (73.9)
No	43 (26.1)

FP: Family planning

births. This is because the majority were Muslims and Hausas who are more receptive to the idea of spacing than limiting births as the latter is believed to be discouraged by Islam.[21]

Less than half knew the prevention of abortion and STIs as the benefits of FP. These findings agree with a study done in Ethiopia,[22] but studies done in Osun, Ghana, and Papua New Guinea contradict these findings.[11,23,24] There seems to be less knowledge on the other benefits of FP (prevention of abortion and STIs, and improving the standard of living) aside from the obvious ones (limiting and spacing births and improving child's health) hence the need for increased public enlightenment on these. Menstrual irregularities/irregular bleeding was the most common known side effects of contraceptive methods which were followed by weight gain. This is not surprising as these changes are easily noticeable especially abnormal bleeding as this could affect the sexual relationship between couples.

The male condom was the most common modern method of FP known by the respondents (90.3%). Several studies agree with the finding of the condom as the most widely known method.[8,17,24] For a high rate of use to be attained,

Table 5: Factors associated with knowledge of family planning amongst respondents

Variable	Knowledge			Test statistics
	Poor, *n* (%)	Fair, *n* (%)	Good, *n* (%)	
Age group (years)				
<40	46 (50.5)	18 (19.8)	27 (29.7)	χ^2=2.309
≥40	29 (39.2)	20 (27.0)	25 (33.8)	*P*=0.315
Tribe				
Hausa	71 (47.7)	33 (22.1)	45 (30.2)	χ^2=2.992
Others	4 (25.0)	5 (31.2)	7 (43.8)	*P*=0.224
Religion				
Islam	74 (46.8)	36 (22.8)	48 (30.4)	Fisher's exact
Christianity	1 (14.3)	2 (28.6)	4 (57.1)	*P*=0.208
Occupation				
Informal sector	58 (61.7)	24 (25.5)	12 (12.8)	χ^2=37.647
Formal sector	17 (23.9)	14 (19.7)	40 (56.3)	*P*<0.001
Educational level				
Informal	22 (73.3)	7 (23.3)	1 (3.3)	χ^2=15.511
Formal	53 (39.3)	31 (23.0)	51 (37.8)	*P*<0.001
Type of marriage				
Monogamous	57 (51.4)	18 (16.2)	36 (32.4)	χ^2=9.523
Polygamous	18 (33.3)	20 (37.0)	16 (29.6)	*P*=0.009
Number of children				
≤4	44 (50.6)	15 (17.2)	28 (32.2)	χ^2=3.766
>4	31 (39.7)	23 (29.5)	24 (30.8)	*P*=0.152
Age of wife (years)				
≤35	65 (47.8)	32 (23.5)	39 (28.7)	χ^2=2.994
>35	10 (34.5)	6 (20.7)	13 (44.8)	*P*=0.224
Wife's education				
Informal	41 (57.2)	15 (24.6)	5 (8.2)	χ^2=26.880
Formal	34 (32.7)	23 (22.1)	47 (45.2)	*P*<0.001
Wife's occupation				
Informal sector/unemployed	72 (52.2)	33 (23.9)	33 (23.9)	χ^2=24.127
Formal sector	3 (11.1)	5 (18.5)	19 (70.4)	*P*<0.001
SC				
Upper SC (I and II)	5 (13.5)	6 (16.2)	26 (70.3)	χ^2=59.863
Middle SC (III)	13 (28.9)	11 (24.4)	21 (46.7)	*P*<0.001
Lower SC (IV and V)	57 (68.7)	21 (25.3)	5 (6.0)	
Perception grade				
Negative perception	44 (93.6)	1 (2.1)	2 (4.3)	χ^2=61.503
Positive perception	31 (26.3)	37 (31.4)	50 (42.4)	*P*<0.001

χ^2=Pearson's Chi-square test, *P*<0.05. SC: Social class

the population has to be very familiar with at least one of the modern methods of contraception. Other methods of FP (male sterilization, lactational amenorrhea, and IUCD) were less well known thus indicating the need for increased education of the people on these.

The majority (45.5%) of the participants had poor knowledge of FP. The knowledge scores in this study are worrisome because a good knowledge of FP is a prerequisite to utilization. Good knowledge of FP was significantly associated with the respondents' and their wives' occupation and educational level, type of marriage, SC, and perception. SC and perception were found to be the predictors of good FP knowledge. Those with negative perception were about 8 times less likely to have a good knowledge of FP than those with a positive perception. Those in the upper and middle SCs were about 16 times and 7 times more likely respectively to have a good knowledge of FP compared to those in the lower SCs. SC was computed using the occupation and level of the participants and their wives; more than half of the respondents and their wives had tertiary and at least secondary education, respectively, thus pointing to the influence of formal education on FP. Age of the respondent, educational attainment, and wealth quintile have been documented in a previous study to be positively associated with knowledge of FP.[17,18]

The majority did not hold the opinion that FP is for the women alone and this is reflected in the high proportion who think that men should escort their spouses to FP clinics; studies done in Anambra, Enugu, and Uganda agree with the findings of this

Table 6: Factors associated with the perception of family planning amongst respondents

Variable	Perception		Test statistics
	Negative, *n* (%)	Positive, *n* (%)	
Age group (years)			
<40	29 (31.9)	62 (68.1)	χ^2=1.140
≥40	18 (24.3)	56 (75.7)	*P*=0.286
Tribe			
Hausa	44 (29.5)	105 (70.5)	Fisher's exact
Others	3 (18.8)	13 (81.2)	*P*=0.561
Religion			
Islam	47 (29.7)	111 (70.3)	Fisher's exact
Christianity	0 (0.0)	7 (100.0)	*P*=0.091
Occupation			
Informal sector	40 (42.6)	54 (57.4)	χ^2=21.224
Formal sector	7 (9.9)	64 (90.1)	*P*<0.001
Educational level			
Informal	16 (53.3)	14 (46.7)	χ^2=11.114
Formal	31 (23.0)	104 (77.0)	*P*=0.001
Type of marriage			
Monogamous	35 (31.5)	76 (68.5)	χ^2=1.545
Polygamous	12 (22.2)	42 (77.8)	*P*=0.214
Number of children			
≤4	24 (27.6)	63 (72.4)	χ^2=0.073
>4	23 (29.5)	55 (70.5)	*P*=0.787
Age of wife (years)			
≤35	38 (27.9)	98 (72.1)	χ^2=0.112
>35	9 (31.0)	20 (69.0)	*P*=0.738
Educational level of wife			
Informal	31 (50.8)	30 (49.2)	χ^2=23.6697
Formal	16 (15.4)	88 (84.6)	*P*<0.001
Occupation of wife			
Informal sector/unemployed	47 (34.1)	91 (65.9)	χ^2=12.858
Formal	0 (0.0)	27 (100.0)	*P*<0.001
SC			
Upper SC (I and II)	0 (0.0)	37 (100.0)	χ^2=41.337
Middle SC (III)	5 (11.1)	40 (88.9)	*P*<0.001
Lower SC (IV and V)	42 (50.6)	41 (49.4)	
Knowledge grade			
Poor	44 (58.7)	31 (41.3)	χ^2=61.503
Fair	1 (2.6)	37 (97.4)	*P*<0.001
Good	2 (3.8)	50 (96.2)	

χ^2=Pearson's Chi-square test, *P*<0.05. SC: Social class

study.[9,19,25] The findings in this study are encouraging since the majority hold the opinion that men should participate in FP just like women and even if they do not participate as at the time of the survey, there is hope in the future that they may do so because although awareness does not equate practice, it is the first step to it.

More than half of the respondents think that men too can use a FP method. It has been said that men have an unmet need for FP and there are limited coitus-independent options of FP for men[26] so the fact that quite many in this study think that men too can use FP may be a pointer that they will eventually use when such methods are made available to them.

A quarter thinks that only the husband should decide on the use of a FP method and this is similar to what was reported in a study done in Osun, Ondo, and Oyo States where 29% think only the men should decide on the use of FP method.[11,27] This finding is not encouraging as so many still have the ideology of ancient patrilineal societies where only men make the decision. Three-fifth thinks that a couple should have as many children as they want and this disagrees with the studies conducted in Anambra, Abakpa Nike Enugu, and Ghana where the majority were in favor of the determination of family size.[9,24,25] The reason for the difference with previous studies may be as a result of the religion of the majority of the respondents being Islam and some Muslims believe in a divine injunction of

Table 7: Predictors of knowledge and perception on family planning amongst the respondents

Predictors	aOR	95% CI (lower-upper)	*P*
Predictors of knowledge			
Education			
Informal versus formal*	0.52	0.10-2.58	0.419
Occupation			
Informal/unemployed versus formal*	0.88	0.30-2.56	0.810
Education of the wife			
Informal versus formal*	2.55	0.44-14.79	0.295
Occupation of the wife			
Informal/unemployed versus formal*	0.83	0.24-2.89	0.768
Type of marriage			
Monogamous versus polygamous*	0.80	0.33-1.96	0.625
SC			
Upper versus lower*	15.75	2.14-116.03	0.007
Middle versus lower*	6.95	1.21-39.82	0.030
Perception			
Negative versus positive*	0.13	0.03-0.59	0.008
Predictors of perception			
Education			
Informal versus formal*	1.08	0.32-3.67	0.907
Occupation			
Informal/unemployed versus formal*	1.29	0.27-6.06	0.749
Education of the wife			
Informal versus formal*	0.75	0.21-2.71	0.663
Occupation of the wife			
Informal/unemployed versus formal*	<0.001	<0.001	0.998
SC			
Middle versus lower*	4.78	0.86-26.61	0.074
Knowledge			
Poor versus good*	0.10	0.02-0.51	0.006
Fair versus good*	5.12	0.40-66.23	0.211

*Reference group $P<0.05$. aOR: Adjusted odds ratio, CI: Confidence interval, SC: Social class

procreation. The finding of three-fifths of the respondents being in favour of not limiting births is upheld by the finding of a higher percentage who knew FP is for spacing births than limiting births.

The number of respondents with a good perception of FP was quite high (71.5%) and is similar to what was reported in a study carried out in Osun State where the perception of the majority (69.8%) of the participants was positive.[8] Positive perception toward FP may foster adoption and utilization of FP. Positive perception of FP was significantly associated with the respondents' and their wives' occupation and level of education, SC, and knowledge of FP. Only knowledge predicted positive perception of FP; those with poor knowledge of FP were about ten times less likely to have a positive perception of FP than those with good knowledge of FP. The finding of knowledge of FP predicting perception on FP further buttresses the need for intensified education of the public on FP through media, schools, and worship places. In a study done in three South-western States, religion, marriage type, educational attainment, and occupation were found to be the predictors of perception of FP thus contradicting the findings in this study.[2]

Conclusion

Although the knowledge of some specific methods was high, a relatively high proportion had a cumulative knowledge score that was not encouraging as the majority had poor knowledge of FP. Participants who had a positive perception of FP were the majority. SC and perception of FP were the predictors of good knowledge of FP while knowledge was the only predictor of positive perception of FP. There is a need by the Sokoto State Government, LGAs, and religious leaders to increase information on FP, especially on the benefits and methods, and the need for males to participate in FP through the enlightenment of the public using the media, schools, and worship places.

Limitations of the study

Some respondents may not have volunteered the whole information requested as FP is a sensitive issue in the region as a result of religion and culture. Attempts were made to decrease this problem by reassuring the participants that all of the information provided will be held with the utmost confidentiality and the purpose of the study was explained to them.

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Conflicts of interest
There are no conflicts of interest.

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