Original Article

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Factors influencing male involvement in family planning in Sokoto metropolis, Nigeria

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ABSTRACT

C-Int

Background: Lack of male involvement in family planning (FP) has been highlighted as one of the factors responsible for the low contraceptive prevalence rate in Nigeria. Male involvement in family planning can lead to contraceptive uptake and enhance the effective and continued use of contraceptive methods. **Aim:** This study aimed to assess male involvement in FP and determine the factors influencing male involvement in FP in Sokoto metropolis, Nigeria. **Materials and Methods:** It was a descriptive cross-sectional study done in Sokoto metropolis in November 2017 among 177 married men selected through a multistage sampling technique. A structured interviewer-administered questionnaire was used. Data were analyzed using SPSS version 23. **Results:** The mean age of the respondents was 39.4 ± 8.8 years, 84 (50.9%) had ever used a contraceptive method, only 54 (32.7%) were current users of a contraceptive method, and 83 (50.3%) were highly involved in family planning. The factors significantly associated with male involvement in family planning were the respondents and their wives' occupation and educational level, age of the respondents, social class, ever use, and current use of a contraceptive method. The predictors of male involvement in family planning were social class (aOR= 8.53, 95% CI= 1.82-39.90) and ever use of a contraceptive method (aOR= 20.68, 95% CI= 7.56-56.58). **Conclusion:** The level of male involvement in family planning established in this study is suboptimal; therefore, it is necessary to increase awareness of the need for more males to be involved in family planning.

Keywords: Family planning, contraceptive method, male involvement, Sokoto

INTRODUCTION

Nigeria has one of the fastest-growing populations in the world, making it the seventh most populous country worldwide.1 This rapid and unprecedented increase in population is of major concern because of its potential to hinder the attainment of health and other developmental goals.² Unfortunately, the utilization of family planning (FP) methods has remained low in Nigeria despite its high fertility rate and decades of FP programmes.¹ The country's total fertility rate (TFR) has been declining slowly, and as of 2018, it was 5.3 births per woman.^{1,3} The Northwestern part of the country has a TFR of 6.6, which is the highest in the country, and that of Sokoto State is 7.0.3 The country's contraceptive prevalence rate (CPR) has remained low over the decades, currently 17% at the national level, 7% in the North-west zone and 2.1% in Sokoto State.3 Lack of male involvement in FP has been highlighted as one of the factors responsible for the low CPR amongst other

factors such as the desire to have more children, myths and misconceptions, and the fear of side effects.^{1,4} Prevalence of joint decision-making by husbands and wives on contraceptive methods is very low in Sokoto, with just 8.7% reported in a rural community in Sokoto State, while in Enugu, it was 56.4%, and 74% in Sri Lanka.5-7 In a survey carried out in Olorunda LGA, Osun State, the overall reported involvements among the respondents was found to be 4.8%.4 Studies done in Bangladesh and New Delhi reported the level of male involvement in FP as 63.2%, and 72.5%, respectively.^{8,9} Empirical evidence suggests that male involvement in FP can lead not only to contraceptive uptake but also to its effective use and continuation of use.⁴ Unfortunately, for many decades, men have rarely been involved in FP programs until 1995, when the importance of men's involvement in reproductive health came to the limelight.4

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This was because it was realized that though women are the users of most contraceptive methods, men are the primary decision- makers and excluding them in FP was a losing strategy with serious consequences for not only the men but for their spouses and children.⁴

Male involvement in FP is broad and includes men's knowledge of FP, attitude about the use of contraception, communication with partners about FP, choices about appropriate contraceptive methods, giving emotional and behavioral support to their partners' contraceptive use.⁹ Male involvement in FP encompasses all organizational activities aimed at men as a discrete group which have the objective of increasing the acceptability and practice of FP by both men and women.¹⁰

The current unmet need is 19% in Nigeria, the North West has an unmet need of 14.4%, and Sokoto State has 13%.3 Nigeria has the highest maternal mortality ratio in sub-Saharan Africa and the second highest in the world,5 with maternal deaths accounting for 31% of all deaths among women aged 15-49 years and the maternal mortality ratio was 512 maternal deaths per 100,000 live births.3 Unsafe abortion, a common endpoint of unwanted pregnancy in Nigeria, contributes about 20-40% of the annual maternal deaths.5 It has been shown that the rate of induced abortions is an indicator of the current state of family planning in any country, so the high rate of unsafe abortion in Nigeria may be attributed mainly to low CPR.5 Most researches carried out on FP interviewed married women of reproductive age, and information about men were gathered by proxy from their wives.¹¹ Such information may be wrong, incomplete, or biased because many women are afraid to initiate a discussion on FP with their spouses, either for fear that their partners might respond violently or due to cultural or religious restraint.11

Regrettably, policies and programs based on such findings have not had the expected success in increasing CPR and at the same time reducing overall fertility.¹² Hence the need to study male involvement in FP in men from a different and more objective lens: men themselves. In Nigeria, data on male involvement in FP are generally scanty, and this is most especially so in the Northern part of the country. There is also a need to explore such concerns as the factors influencing male involvement in FP. This study was carried out to assess male involvement in FP and to determine the factors influencing male involvement in FP in Sokoto Metropolis, Nigeria.

MATERIALS AND METHODS Study Design and Population

The study was cross-sectional in design, and it was carried out in Sokoto metropolis, Nigeria, in November 2017. Sokoto metropolis includes four Local Government Areas (LGAs): Sokoto North, Sokoto South, Dange-Shuni, and Wamakko. The study population consisted of married men whose wives were within the reproductive age group (15-49 years) and had been married for at least one year before the commencement of the study. In instances where a man had more than one wife, questions were asked about the most senior wife if she was within the reproductive age group. If the most senior wife is not within the reproductive age group, then the questions were asked about the second most senior wife if she was within the reproductive age group.

Sample Size Estimation and Sampling Technique

The sample size was estimated at 159 using the formula for proportion,13 a CPR of 11.7% from a previous study,14 and a precision level of 5%. One hundred and seventy-seven eligible study participants were enrolled in the study in anticipation of a 90% response rate and were selected by a multi-stage sampling technique. Stage 1 entailed selecting 2 LGAs, while in stage 2, two wards were selected from each of the selected LGA, and in stage 3, one settlement was selected from each of the 4 wards; all these were done through a simple random sampling technique by balloting. Proportionate allocation of participants was done as follows: 40, 59, 51, and 28 respectively to the four selected settlements. In stage 4, systematic random sampling was used to enroll households to obtain the study subjects after obtaining the sampling frame.

Data Collection

interviewer-administered А 54-item structured questionnaire was adapted from previous studies2,4,15-17 and used to obtain information on the respondents' socio-demographic characteristics and male involvement in FP. The questionnaire's content validity was assessed after it was reviewed by researchers of the Community Health Department, Usmanu Danfodiyo University Sokoto, Nigeria. The questionnaire was pretested by the principal researcher and six research assistants in Sokoto North LGA (which was not one of the LGAs selected for the study) after the conclusion of the training of the research assistants who were medical students of Usmanu Danfodiyo University Sokoto.

Ever use and current use of any FP method was when either the wife or the husband had ever used or was using a FP method respectively. Respondents' involvement in FP was scored and graded on an 8- point scale of self-reported actions by married men. Each correct response was scored '1' while wrong, and no responses were scored '0'. These were converted into percentages and graded into $\geq 60\%$ = high male involvement and < 60% = low male involvement.¹⁵ The social class of the couple was computed using the occupation and educational level of the respondents and their wives based on Oyedeji's method.¹⁸

Data were processed using IBM SPSS version 23. Quantitative variables were summarized using mean and standard deviations, while qualitative variables were summarized using frequencies and percentages. The Chi-square test was used for bivariate analysis, while binary logistic regression analysis was used to determine the predictors of male involvement in FP. All levels of statistical significance were set at p < 0.05.

Ethical Consideration

Ethical clearance for the study was obtained from the Research and Ethics review committee of the Sokoto state Ministry of Health; permission was obtained from the LGA and traditional ruler of each settlement, while written informed consent was obtained from the participants.

RESULTS

Socio-demographic characteristics of respondents

A total of 177 questionnaires were administered to the respondents; 165 were filled and valid for use after data cleaning (giving a response rate of 93%). The mean age of the respondents was 39.4 ± 8.8 years, with 63 (38.2%) being in 35-44-year age group. Sixty-nine were civil servants (41.8%), 88 had tertiary education (53.3%) and 87 had at most four children (52.7%). The majority were Hausa and Muslims (Table 1). The mean age of the wives was 28.3 \pm 6.8 years with the majority being in 25-34-year age group. Most of the wives had only Qur'anic education 61 (37%) and were unemployed 102 (61.8%). Only 11 (6.7%) of the couple were in social class I (Table 2).

Male involvement in family planning

Eighty-four (50.9%) of the respondents or their wives had ever used a FP method and only 54 (32.7%) of the respondents or their wives were using a FP method at the time of the survey (Figure 1). Implants were the commonest FP methods being used by the couples (25, 46%).

respondents		
Variables	Frequency (%) n = 165	
Age group (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 (4.2)	
Other (e.g., Fulani, Egbira)	4 (2.4)	
Religion		
Islam	158 (95.8)	
Christianity	7 (4.2)	
Educational level		
Quranic	30 (18.2)	
Primary	12 (7.3)	
Secondary	35 (21.2)	
Tertiary	88 (53.3)	
Occupation		
Trader	54 (32.7)	
Farmer	12 (7.3)	
Artisan	19 (11.5)	
Student	2 (1.2)	
Civil servant	69 (41.8)	
Other (e.g., Gateman, Bike)	9 (5.5)	
No of children		
≤ 4	87 (52.7)	
> 4	78 (47.3)	

Table 1: Socio-demographic characteristics of

Table 2: Socio-demographic characteristics of the respondents and their wives

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Variables	Frequency (%) n = 165
Age group 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)
Student	3 (1.8)
Civil servant	24 (14.5)
Other (e.g., Nanny, Baker)	2 (1.2)
Social class 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)

The commonest reason for the current use of FP was to space birth (48, 88.9%) [Table 3)]. Less than half of the respondents (80, 48.5%) discussed FP with their wives in the preceding one year and 74 (44.8%) discussed on the desired number of children. Only 73 (44.2%) had ever

accompanied their wives to a FP clinic and 76 (46.1%) had ever provided money for FP services. The majority 117 (70.9%) of the respondents said they made the final decision on FP jointly with their wives and about half 83 (50.3%) of the respondents were highly involved in FP (Table 4).

Factors associated with male involvement in family planning

High male involvement in FP was associated with the respondents and their wife's occupation and educational level, age of the respondents, social class, ever use, and current use of a FP method. The proportion of respondents who were highly involved in FP was significantly higher among those in the upper social classes (91.9%) as compared to those in the middle social class (60.0%) and lower social classes (26.5%), those who had ever used a method of FP (85.7%) as compared to those who had never used a method of FP (13.6%) [Table 5].

In binary logistic regression analysis, upper social class (I & II) and ever use of a FP method were found to be predictors of high male involvement in FP. Those in the upper social class and those who had ever used a method of FP were about 15 times (aOR= 14.77, 95% CI= 3.24-67.45, p=0.001) and 40 times (aOR= 39.67, 95% CI= 16.08-97.87, p< 0.001) more likely to be highly involved in FP respectively (Table 6).

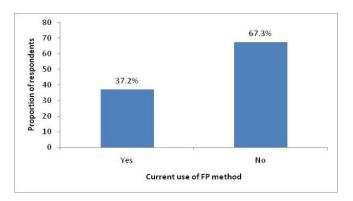


Figure 1: Current use of family planning methods by the respondents

DISCUSSION

This study assessed male involvement in FP and the factors influencing male involvement in FP in Sokoto Metropolis, Nigeria. Whereas about half of the respondents or their wives had ever used a method of FP, 32.7% were using a method of FP at the time of the survey which is in line with the studies done in Ogun, Uganda, and Tanzania¹⁹⁻²¹ but differs from the findings

of National Demographic and Health Survey of 2018 where the CPR was 17% nationally and 2.1% in Sokoto State.³ The similarity with the former studies is likely because the respondents in those studies were men; and the dissimilarity with the later study likely because the respondents were women and the figures were for both the urban and rural areas. Although CPR in this study is encouraging, this is however not surprising as about half of the respondents had tertiary education and more than half of their wives had at least secondary education as an increase in educational attainment is positively associated with the use of a FP method.³ Also, this study was done in urban areas where access to FP services may not be a problem.

Variables	Frequency (%) n = 54
Type of FP method used by the couples	11 = 54
Male condom	6 (11.1)
Pills	4 (7.4)
	16 (30.0)
Injectables Implants	25 (46.0)
IUCD	
Source of FP method	3 (5.5)
PHC	0 (16 7)
	9 (16.7)
Hospital	37 (68.5)
Drug store (chemist)	8 (14.8)
Purpose of using a FP method*	40 (00 0)
Space birth	48 (88.9)
Achieve desired family size	26 (48.1)
Improves family's financial condition	16 (29.6)
Avoid unwanted pregnancy	12 (22.2)
Promote child health and improve	12 (22.2)
quality of child care	
Sexual fulfillment	4 (7.4)
Avert potential adverse effects of	1 (1.9)
high fertility on the woman's health	
Reasons for not using any FP method*	
No desire to use / not interested	72 (64.9)
Wife is currently pregnant	24 (21.6)
Religion / culture	19 (17.1)
Lack of awareness about FP	12 (10.8)
Delay in return of fertility	11 (9.9)
Side effects	8 (7.2)
Wife's refusal	9 (8.1)
Doesn't know where to get services	8 (7.2)
Encourage infidelity	4 (3.6)
Decrease in sexual urge of women	4 (3.6)
Desire for more children	31 (27.9)
Wife just delivered	1 (0.9)
Willingness to use FP in the future	· · /
Yes	68 (61.3)
No	43 (38.7)

Table 3: Pattern of family planning methodsuse among the respondents

An analysis of the FP methods currently being used by the respondents and or their wives revealed implants to be the commonest method used. The fact that implant was the commonest method utilized in this study may be because 68.5% obtained their commodities in the hospital where the expertise for the insertion of implants is available. Since implants are long-acting reversible contraceptives, and they are being utilized by the majority in this study, it is hopeful that couples would be able to meet their needs for spacing and limiting.

The commonest reason for the current use of FP was to space birth (88.9%) and a little less than half (48.1%) were using FP to achieve the desired family size. This may be explained by the fact that people in Northern Nigeria by their religion and tribe (Islam and Hausa) are more receptive to the idea of using FP for spacing births instead of limiting births as the latter is believed to be disallowed in the religion by some people.¹⁴ Almost twothirds of the respondents gave lack of interest as the reason they or their wives were not using a FP method as at the time of the survey. This underscores the need to enlighten the people by providing more information on the benefits of FP.

Only half of the respondents were highly involved in FP which is in tandem with the results recorded in studies done in Bangladesh and New Delhi^{8,9} but different from the findings of a study done in Osun, Ogun, and Rwanda.^{4,19,22} The outcome demonstrated in this study is encouraging but sub-optimal because as it is, the majority (74.5%) of the respondents had at least secondary education. However, level of education may not necessarily apply to their involvement in FP due to their religion and culture.

Less than half of the respondents had a discussion with their wives on FP in the preceding one year (48.5%). This is in consonance with the findings from the study done in Tanzania where 45.4% reported that they had a discussion with their wives in the preceding one year²⁰ but a study done in Sri Lanka recorded a higher figure (87.2%).⁶ Though the outcome from this study is suboptimal, it is hoped that with continuous enlightenment campaigns, discussion about FP by couples will be more frequent. Research has shown that communication between spouses is an important step before utilization and sustained use of FP.⁴

Regarding discussion with wife on the desired family size and on child spacing, 44.8% and 62.4% respectively indicated that they have ever done so in the past. The fact that a higher proportion of the respondents said they had a discussion on child spacing than child limiting was not surprising as 88.9% and 48.1% of the respondents currently using a FP method said it was to space birth and limit family size respectively, thus further buttressing the receptivity of child spacing more than child limiting in this part of the country.

Table 4: Involvement of the respondents infamily planning

ncy (%)
165
18.5)
51.5)
57.6)
12.4)
14.8)
55.2)
62.4)
37.6)
46.1)
53.9)
14.2)
55.8)
14.5)
85.5)
27.3)
1.8)
70.9)
19.7)
50.5)

A smaller proportion of the respondents had ever accompanied their wives to the FP clinics (44.2%) and provided money for FP services (46.1%) which were supported by a study done in Ogun State where 39.6% accompanied their wives to FP clinics.¹⁹ However, the findings were contrasted by a study done in Osun State where 80.9% provided money for FP and 15.5% accompanied their wives to FP clinics.⁴ The results in this study are encouraging, and it is anticipated that with increased enlightenment, more men will be involved in FP which may increase the CPR as research has shown that partner support is associated with the use of FP.²²

Joint decision-making by couples about the use of FP is a key determinant of contraceptive use.² The majority of the respondents said they made the final decision on FP jointly with their wives, 27.3% said they made the decisions alone and 1.8% said only the wife decided with none admitting to decisions been made by the husband or wives' relatives. These findings were similar to the study done in Rwanda²² but in contrast to the findings of the study carried out in Kware in Sokoto State.⁷ The high prevalence of joint decision-making by the couple as reported by men in this study as compared to other Nigerian studies may probably be an overestimate because three-fourth had a minimum of secondary education, and they do not want to be recognized as the prime decision-makers because they know that the right thing to do is to make a decision jointly.

Respondents in the upper social class and those who had ever used a method of FP were about 15 times and 40 times more likely to be highly involved in FP respectively. Social class was computed using the occupation and educational level of the husbands and wives. More than half of the respondents in this study had tertiary education and more than half of their wives had at least secondary education; this underscores the importance of high educational achievement in both spouses in male involvement in FP. Similarly, respondents who had ever used a method of FP were likely to have received some form of enlightenment on FP thus making their involvement in FP more likely.

Variables	Level of male involvement		Test of significance	
	Low	High		
	Frequency (%)	Frequency (%)		
Age groups (years)				
< 40	52 (57.1)	39 (42.9)	$\chi^2 = 4.500,$	
≥ 40	30 (40.5)	44 (59.5)	$p = 0.034^*$	
Occupation	()		1	
Informal sector	62 (66.0)	32 (34.0)	$\chi^2 = 23.104$,	
Formal sector	20 (28.2)	51 (71.8)	p < 0.001*	
Educational level	× ,	× ,	F	
Informal	23 (76.7)	7 (23.3)	$\chi^2 = 10.668,$	
Formal	59 (43.7)	76 (58.3)	$p = 0.001^*$	
No of children	× ,	× ,	F	
≤ 4	46 (52.9)	41 (47.1)	$\chi^2 = 0.743,$	
> 4	36 (46.2)	42 (53.8)	p = 0.389	
Age of wife (years)	· · · ·		1	
≤ 4 (<i>y</i>)	70 (51.5)	66 (48.5)	$\chi^2 = 0.974,$	
> 4	12 (41.4)	17 (58.6)	p = 0.324	
Education level of wife	()		· ·	
Informal	46 (75.4)	15 (24.6)	$\chi^2 = 25.595,$	
Formal	36 (34.6)	68 (65.4)	p < 0.001*	
Occupation of wife			·	
Unemployed / Informal	79 (57.2)	59 (42.8)	$\chi^2 = 19.227$,	
sector	× ,	× ,	p < 0.001*	
Formal sector	3 (11.1)	24 (88.9)	·	
Social class	× ,	× ,		
Upper SC (I and 2)	3 (8.1)	34 (91.9)	$\chi^2 = 46.094$,	
Middle SC (III)	18 (40.0)	27 (60.0)	p < 0.001*	
Lower SC (IV and V)	61 (73.5)	22 (26.5)	·	
Ever use a FP method				
Yes	12 (14.3)	72 (86.7)	$\chi^2 = 85.830,$	
No	70 (86.4)	11 (13.6)	p < 0.001*	
Current use of a FP			·	
method				
Yes	5 (9.3)	49 (90.7)	$\chi^2 = 52.505,$	
No	77 (69.4)	34 (30.6)	p < 0.001*	

Table 5: Factors associated with male involvement in FP among the respondents

 χ^2 = Pearson's Chi-square test; SC = Social class; *Significant (p<0.05)

Variables	aOR	95%	95% CI	
	_	Lower	Upper	-
Social class				
Upper versus Lower*	14.77	3.24	67.45	0.001**
Middle versus Lower*	1.95	0.68	5.56	0.214
Ever use of a FP method				
Yes versus No*	39.67	16.08	97.87	<0.001**

Table 6: Predictors of male involvement in FP among the respondents

aOR = adjusted Odds Ratio; CI = Confidence Interval; *Reference group; **Significant (p<0.05)

CONCLUSION

The level of male involvement in FP established in this study is suboptimal; male involvement in FP was influenced by occupation and educational level of the respondents and their wives, social class of the couple, and ever use of a FP method. This underscores the need by the Sokoto State Government and the various non-governmental organizations like MSI, communitybased organizations and religious bodies to increase the information on FP and the need for males to be involved through public enlightenment programs using all forms of media.

Limitations of the study

The male involvement actions were self-reported by the respondents and there is tendency for over-reporting of desirable actions and under-reporting of undesirable ones. An attempt was made to minimize this by assuring them of confidentiality and buttressing that the research is only for academic purposes.

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Nil.

Conflict of interest

None declared.

REFERENCES

- National Population Commission (NPC) [Nigeria], ICF International. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria and Rockville, Maryland, USA: National Population Commission (NPC) [Nigeria] and ICF International; 2014. pp. 31-116.
- Nettey OEA, Enuameh YA, Mahama E, Sulemana A, Adjei G, Gyaase S, et al. Family planning awareness, perceptions and practice among community members in the Kintampo Districts of Ghana. Adv Reprod Sci 2015; 3(1): 1-12.

- 3. National Population Commission (NPC) [Nigeria], ICF. Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: National Population Commission (NPC) [Nigeria] and ICF International; 2019. pp. 43-162.
- 4. Adelekan A, Omoregie P, Edoni E. Male involvement in family planning: challenges and way forward. Int J Population Res 2014: 1-9.
- Ajah LO, Dim CC, Ezegwui HU, Iyoke CA, Ugwu EO. Male partner involvement in female contraceptive choices in Nigeria. J Obstet Gynaecol 2014; 35(6): 628-31.
- Rahman ALF, Razmy AM. Male participation in family planning. SEUIR Repository [Internet]. 2011. Available from: <u>http://ir.lib.seu.ac.lk/handle/123456789/892</u> [Last accessed on 2016 October 6].
- Raji MO, Oche MO, Kaoje AU, Raji HO, Ango JT. Awareness and utilization of family planning commodities in a rural community of North West Nigeria. Caliphate Med J 2013; 1(4): 103-8.
- Joshi L. Male participation in family planning: human behaviour perspective. J Nepal Health Re Council 2015; 13(31): 188-95.
- Kamal MM, Islam SM, Alam MS, Hassan ABME. Determinants of male involvement in family planning and reproductive health in Bangladesh. Am J Human Ecol 2013; 2(2): 83-93.
- Ozumba CO. Family planning among married men: a pilot study in Abakpa Nike Enugu state Nigeria. Sixth African Population Conference 2011: 12-23.
- 11. Aransiola JO, Akinyemi AI, Fatusi AO. Women's perceptions and reflections of male partners and couple dynamics in family planning adoption in selected urban slums in Nigeria: a qualitative exploration. BMC Public Health 2014; 14(869): 1-14.
- 12. Akindele R, Adebimpe W. Encouraging male involvement in sexual and reproductive health: family planning service providers' perspectives. Int J Reproduc Contracep Obstet Gynaecol 2013; 2(2): 119-23.
- Ibrahim T. Research Methodology and Dissertation Writing for Health & Allied Health Professionals. 1st ed. Abuja, Nigeria: Cress Global Link Limited; 2009. pp. 74-75.

- Schwandt H, Galadanci H, Herbert A. Assessment of family planning use in Bauchi and Sokoto States, Nigeria. Maryland: John Hopkins University; 2015: 1-56.
- 15. Kassa M, Abajobir AA, Gedefaw M. Level of male involvement and associated factors in family planning services utilization among married men in Debremarkos town, Northwest Ethiopia. BMC Int Health Human Rights 2014; 14(33): 1-8.
- Tilahun T, Coene G, Luchters S, Kassahun W, Leye E. Family planning knowledge, attitude and practice among married couples in Jimma Zone, Ethiopia. PLoS ONE 2013; 8(4): 1-8.
- 17. Tilahun T, Coene G, Temmerman M, Degomme O. Spousal discordance on fertility preference and its effect on contraceptive practice among married couples in Jimma zone, Ethiopia. Reprod Health 2014; 11(27): 1-10.
- Oyedeji G. Socio-economic and cultural background of hospitalised children in Ilesha. Niger J Paed 1985; 12(4): 111-7.

- Ani F, Abiodun O, Sotunsa J, Faturoti O, Imaralu J, Olaleye A. Demographic factors related to male involvement in reproductive health care services in Nigeria. European J Contracep Reprod Health Care 2016; 21(1): 57-67.
- Chuwa M. Male involvement in family planning practice. Afr J Midwif Women's Health 2012; 6(3): 132-8.
- Kabagenyi A, Ndugga P, Wandera SO, Kwagala B. Modern contraceptive use among sexually active men in Uganda: does discussion with a health worker matter? BMC Public Health 2014; 14(286): 1-8.
- 22. Brunie Al, Tolley EE, Ngabo Fl, Wesson J, Chen M. Getting to 70%: barriers to modern contraceptive use for women in Rwanda. Int J Gynecol Obstet 2013; 123: 11-5.

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