

Original Research Article

Awareness and utilization of contraceptives among males of reproductive age, Jos North, Plateau state, Nigeria

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ABSTRACT

Background: Modern contraceptives are relevant interventions in the reduction of maternal and child morbidity and mortality. Its uptake by females of reproductive age has been found to be influenced by male partners' awareness and utilization. This study aimed to determine the awareness of contraceptives, utilization prevalence and sociodemographic predictors for use among males of reproductive age in Jos North.

Methods: A cross sectional study involving 406 males of reproductive age who were selected by multistage sampling technique. Data was collected using an interviewer-administered semi-structure questionnaire and analysed using SPSS version 23.0. At 95% confidence interval, a p value of <0.05 was considered statistically significant.

Results: There was a high awareness prevalence of contraceptives 378 (93.1%). However, the prevalence of current contraceptive use with partners was low 160 (42.3%). Respondents who were single were more likely to use contraceptives than those who were married or separated (OR 1.8; 95% CI 1.109-2.251). Those between the ages of 35-44 years also had a higher likelihood of using modern contraceptives than younger men (OR 2; 95% CI 0.410-2.436). Education, occupation and family size had no statistically significant association with contraceptive use among respondents.

Conclusions: Despite the high awareness of modern contraceptives among respondents in this study, utilization with partners was low. Predictors of utilization were being single and being in the third decade of life. This could impact on increased risk for both maternal and child mortality. Male targeted contraceptive education is necessary at community levels to improve uptake.

Keywords: Awareness, Males, Modern contraceptives, Reproductive age, Utilization

INTRODUCTION

The use of modern contraceptives and family planning information have been found to be effective in reducing child morbidity and mortality, improving reproductive health and promoting gender equity among women in low and middle-income countries.¹ Modern contraceptives are

drugs or devices which serve the purpose of interfering with the normal process of ovulation, fertilization, and implantation.² Effective contraceptives include barrier types (such as condoms and spermicides), hormone-based methods (such as oral pills, injectables and patches), implants, intrauterine devices (IUDs) and male or female sterilization (tubal ligation or vasectomy).³ These

interventions have been found to reduce the number of high risk and high parity deaths aside from the added benefit of individuals and couples being able to prevent unintended pregnancies and plan their families.^{2,3}

Maternal morbidity and mortality is particularly impacted by the utilization of modern contraceptives through the reduction of hemorrhage and birth complications.¹ About 214 million women of reproductive age in low and middle-income countries who want to avoid pregnancy are not using any form of contraceptive. Furthermore, in Africa 24.8% have an unmet need for modern contraceptives.⁴ The total fertility rate of Nigerian women is 5.8 and even higher in Northern Nigeria and in rural settings.⁵ With a maternal mortality ratio as high as 512/100,000 live births and only 17% of women currently using any method of modern contraceptive, this risk is significantly high among women of reproductive age in Nigeria.^{6,7}

Studies have revealed that uptake of modern contraceptives is impacted by male partners' awareness, acceptance and utilization.^{8,9} The 1994 International Conference on Population and Development in Cairo highlighted the relevance of male involvement in family planning recognizing their role in decision making for reproductive health.¹⁰ Evidence has also shown that contraceptive decision-making is considerably influenced by male partners in Nigerian households. The male role in relationships in that study was found to predict the awareness and use of contraceptives by females.¹¹

The most recent demographic and health Survey (DHS) states that the decision-making power among partnered women in Nigeria was mainly attributed to the male partner; where 66% of users made the decision jointly with their partners. However, 3.3% of the married women who used contraceptives discontinued use because their male partners disapproved. Also, 19% of married women who were non-users reported it was mainly their partner's decision not to use any form of contraceptives.⁷ The DHS generated data regarding awareness, knowledge and use of contraceptives from females mainly. This study on the other hand, was carried out among males of reproductive age; recognizing the important role they play in family planning decision making and their influence in the use of contraceptives by their partners. The paucity of current evidence regarding contraceptive awareness and utilization among males in Plateau state, North Central Nigeria, informed the decision to conduct this study.

The aim of the study was to determine the awareness of contraceptives and utilization prevalence among males of reproductive age in Jenta Apata ward of Jos North Local Government Area (LGA), Plateau state. It also assessed the association between the utilization of contraceptives and their sociodemographic characteristics and the predictors of contraceptive use.

METHODS

The study was carried out in Plateau state between October 2018 and January 2019. Plateau state is located in the North Central region of Nigeria. The total population of the State has been estimated to be about 3,206,531 (1,598,998 males and 1,607,533 females). Jos North is one of two LGAs in the Jos metropolis and one of the seventeen LGAs in the State. The Jos metropolis is the most developed area of the State and has an estimated population of about 736,016 inhabitants.¹²

The study was a cross-sectional study carried out among 406 adult males residing in Jenta Apata, Jos North who were sexually active and were in partnered relationships. Jos North was purposively selected due to the paucity of information on male contraceptive utilization. The sample size was calculated using the Cochran formula where the prevalence of utilization of contraceptives among adult males from a previous study in Mista Ali, Bassa LGA Plateau State (62.8%) was used.¹³ Sample size calculated was 400 after adjusting for non-response. The study population were adult males of reproductive age residing in Jenta Apata, Jos North LGA. Eligible participants were adult males (18 years and older), residing in Jenta Apata ward for over 2 years and who gave consent whilst those who were not sexually active or whose partners had attained menopause were excluded.

A multistage sampling technique was used in which Jenta Apata ward was selected by simple random sampling through balloting out of the 20 wards. Households in the ward were also selected by balloting and participants were selected by cluster sampling when eligible males met the inclusion criteria. After obtaining consent from the eligible respondents, data was collected using a semi-structured interviewer administered questionnaire. The questionnaire was pretested in Tudun Wada ward for clarification of areas of ambiguity. Data collectors were medical students who had been trained for a day on the technique for interview. Following data collection, the responses were appropriately coded, entered into Microsoft excel software and cleaned. The data was then exported to and analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 23.0. Frequency tables were used to present sociodemographic variables such as occupation, marital status and educational status. Chi square test was used to test for association between variables such as age and utilization of contraceptives. Logistic regression was used to determine the predictors of current contraceptive utilization by the respondents. Results were found to be statistically significant if the p value was ≤ 0.05 .

Ethical approval for the study was obtained from the Bingham University Teaching Hospital Ethics Committee and permission obtained from the LGA chairman and ward head. Verbal informed consent was also obtained from all included respondents while maintaining anonymity and confidentiality.

RESULTS

A total of 406 adult men responded to the questionnaire. Table 1 shows that most were single (in partnered relationships) 221 (54.5%) and Christian 391 (96.3%). Almost half 201 (49.5%) had secondary education and 169 (41.6%) were between the ages of 25 and 34 years. The majority of the respondents were of the Igbo tribe and consisted majorly of traders 166 (49.1%). Also, about half of the men interviewed 207 (51%) have children.

Table 1: Sociodemographic characteristics of study respondents (n=406).

Sociodemographic characteristics	N (%)
Age group (years)	
15-24	49 (12.1)
25-34	169 (41.6)
35-44	103 (25.4)
45-54	57 (14.0)
>55	28 (6.9)
Marital status	
Single	221 (54.5)
Married	171 (42.1)
Widowed	2 (2.9)
Divorced/separated	12 (0.5)
Educational status	
None	9 (2.2)
Primary	39 (9.6)
Secondary	201 (49.5)
Tertiary	157 (38.7)
Tribe	
Plateau indigenous	130 (32.0)
Igbo	177 (43.6)
Others*	99 (24.4)
Religion	
Christianity	391 (96.3)
Islam	9 (2.2)
Traditional	6 (1.5)
Occupation	
Traders	166 (40.9)
Artisans	70 (17.3)
Civil servants	37 (9.0)
Students	64 (15.8)
Others**	69 (17.0)
Number of children	
None	199 (49.0)
1-2	96 (23.7)
3-4	76 (18.7)
5>	35 (8.6)

*Others - Hausa, Yoruba, Efik, Igala, Idoma, Urhobo, Nupe and Tiv; **Others -- Farmers, unemployed, retired

Majority 378 (93.1%) of respondents were aware of contraceptives and only 28 (6.9%) had never heard of contraceptives (Table 2).

Table 2: Respondents’ awareness of contraceptives (n=406).

Have you ever heard of contraceptives?	N (%)
Yes	378 (93.1)
No	28 (6.9)

The contraceptive which was well known among respondents was the condom 310 (82%) as shown in Table 3 below, while the least heard of was sterilization 66 (17.5%). The most frequent source of information 127 (33.6%) was the mass media (TV/Radio, Newspaper).

Table 3: Specific contraceptive awareness among respondents.

Type of contraceptive	N (%)
Condoms	310 (82.0)
Oral contraceptive pills	207 (54.8)
Injectables	163 (43.1)
IUDs	78 (20.6)
Implants	85 (22.5)
Sterilization	66 (17.5)

Table 4: Current contraceptive utilization among study respondents (n=378).

Currently using contraceptives with partner	N (%)
Yes	160 (42.3)
Don’t Know	26 (6.9)
No	192 (50.8)

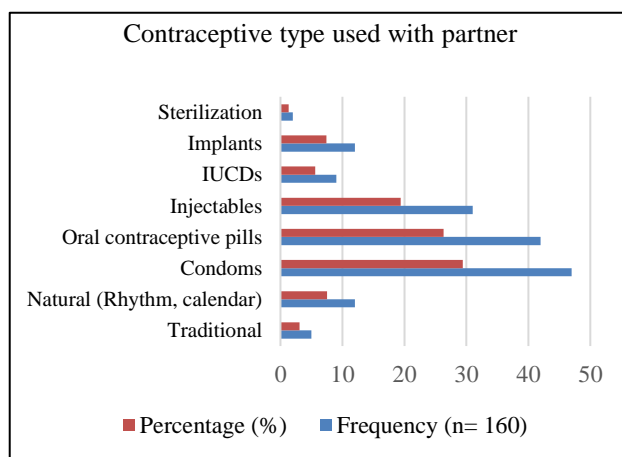


Figure 1: Contraception type used currently by respondents with partners.

One hundred and sixty (42.3%) respondents were currently using contraceptives with their partners (Table 4). The type most frequently used was the male condom 47 (29.4%) followed by the oral contraceptive pills 42 (26.3%) while the least used was sterilization 2 (1.3%) as shown in Figure 1. The most common reason

given for non-utilization of contraceptives was a fear of side effects. There was a statistically significant relationship between age ($p=0.05$) and marital status ($p=0.04$) of respondents and the use of contraceptives as illustrated in Table 5.

Table 5: Association between contraceptive utilization and sociodemographic factors among respondents.

Sociodemographic characteristics	Utilization of contraceptives n=378		X ²	P value
	Yes	No		
Age in years				
15-24	33	14	14.946	0.05
25-34	113	42		
35-44	85	18		
45-54	27	22		
≥55	14	10		
Marital status				
Single	155	46	8.317	0.04
Married	106	58		
Widowed/divorced/ separated	11	2		
Education				
None	7	2	2.921	0.404
Primary	26	12		
Secondary	135	43		
Tertiary	104	49		
Occupation				
Traders	98	46	7.008	0.135
Artisans	56	11		
Civil servants	25	12		
Students	47	15		
Others	46	22		
Number of children				
None	143	50	1.632	0.652
1-2	61	25		
3-4	47	19		
≥5	21	12		

*Others - Farmers, unemployed, retired

Table 6: Predictors of utilization of contraceptives among respondents.

Variables	OR	CI	P value
Age in years			
15-24	1		
25-34	1.141	0.582-1.183	0.994
35-44	2.003	0.410-2.436	0.327
45-54	0.521	0.400-0.530	0.014
>55	0.594	0.470-0.600	0.016
Marital status			
Single	1.844	1.036-2.409	0.07
Married	0.456	0.415-0.965	0.027
Widowed/divorced/ separated	1		

The sociodemographic predictors for the utilization of contraceptives in this study was found to be: ages between 35-44 years (OR=2, CI= 0.410-2.436) and 25-34 years (OR=1, CI=0.582-1.183) with an increased likelihood of use of contraceptives. In addition, it was almost 2 times more likely that respondents who were single will use contraceptives with their partners (OR=1.8, 1.036-2.409) compared to widowed/ separated or divorced respondents as shown in Table 6.

DISCUSSION

The awareness of modern contraceptives and types have been found to influence decision making for utilization by males especially in partnered relationship.¹¹ Most of the respondents had heard of contraceptives in this study. Studies in Nigeria have shown that both males and females have high levels of contraceptive awareness ranging from 89-98% as recorded in Osun, Lagos and Plateau States.¹³⁻¹⁵ However, a study carried out in Enugu State revealed that just about half of the respondents were aware of contraceptives.¹⁶ They ascribed this difference to the place of residence and level of education of the respondents where majority were rural dwellers and had low education unlike in this study. Mass media has been found to play a vital role in disseminating relevant information regarding contraceptive and to encourage behavioural change as revealed in this study and similar to other studies at State and National levels.^{7,13}

Condoms (male and/or female) were the contraceptives which had the highest awareness in this study. It is very likely that in using the mass media as an intervention to curb the HIV/AIDS spread it also promoted the message of family planning. Condoms are popular in most communities and readily available. Awareness of permanent contraception (sterilization) on the other hand, was the lowest in this study. These findings are in keeping with other surveys carried out in Nigeria.^{7,13,15} Studies in Uganda and South Africa also corroborated with findings in this research of a high awareness of condom for the purpose of contraception.^{17,18} A recent survey carried out in the USA revealed that males believed that other types of contraceptives were the responsibility of women and condoms were the men's responsibility.¹⁹ As stated earlier, utilization of modern contraceptives is essential for both men and women of reproductive age and has a wide impact on child and women's morbidity and mortality. Albeit, the current use of contraceptives with partners was relatively low in this study.

This is similar to studies carried out in other Low and Middle-income countries where less than half of the study population used contraceptives.^{9,13,14} In our study, condoms had the highest frequency of use compared to other contraceptive types. Similarly, a study done in Pakistan showed that less than half of the couples were currently using contraceptive methods.⁹ Unlike this study where the major reason for non-use was the fear of side

effects, an Ethiopian study revealed that the reasons for not using contraceptive among couples is a desire to have more children.²⁰ It is possible that this fear of side effects in our study could be attributed to a gap in contraceptive knowledge among our respondents.

The increased likelihood for men within the age group of 35-44 years to use contraceptives compared to young adult males in this study is similar to findings in Nigeria and India, where contraceptive use among men was found to be associated with being 35 years and older.^{13,21} In addition, compared to married, separated/divorced/widowed, single men were more likely to use contraceptives. This was of some concern as the planning for family sizes will be more beneficial to married males who are culturally expected to have families.²⁰ However, this could be attributed to interventions for the prevention of sexually transmitted infections including HIV, which are usually targeted at single men and women. A different finding was observed in a multi-country study, from Rwanda, Cambodia, Nepal and Bolivia which revealed increased likelihood of current use of contraceptives among married men compared to single and previously married. However, in the same study, findings among sexually active Nigerian men corroborated with observations in this study of increase in the utilization of contraceptives among single men.²² Albeit, another study carried out in Kenya revealed that currently married and formerly married men were more likely to report the use of modern contraceptives than single men.²³ Ensuring men of reproductive age regardless of marital status use contraceptives will impact on the reduction of child and maternal morbidity and mortality.

CONCLUSION

Even though the awareness of modern contraceptives in this study was relatively high in our study, the current utilization of respondents with partners was low. The most commonly used contraceptive was the male condom which could be attributed to an increased awareness as a result of social marketing of condoms for sexually transmitted infections including HIV prevention. The sociodemographic predictors for use revealed in this study was being between the ages of 34 and 44 and the single marital status. It is therefore imperative that there are more male targeted contraceptive programs to influence utilization focussed on different types of contraceptives for younger men in partnered relationships. Further qualitative research to explore socio-cultural factors influencing utilization of contraceptives by men will be essential in informing contraception utilization programming.

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