Knowledge, Attitude and Male involvement in family planning as predictors to contraceptive use in Kalabari communities in Rivers State

ABSTRACT

?*This study focused on Knowledge, Attitude and Male involvement in family planning as predictors to contraceptive use in Kalabari communities of Rivers State. The descriptive cross-sectional survey design was adopted for the study. A 2-staged sampling technique was used to select four hundred and forty participants. Data was collected using a semi-structured questionnaire with a reliability coefficient of 0.70. Analysis was done using simple percentage, mean and standard deviation, and binary logistic regression. The finding of this study showed that overall 48.6% are knowledgeable about contraceptives while more than half (51.1%) were not knowledgeable; majority (92.7%) had positive attitude towards contraceptive use while 7.3% had negative attitude towards contraceptive use; and 2.2% were highly involved in family planning while 97.8% had low involvement. The finding of this study on contraceptive utilization showed that 68.6% have ever used contraceptive while 61.2% currently use contraceptives and methods currently used include daily pills (35.2%), condom (22.5%), withdrawal (16.5%), postinor (13.1%), diaphragm (4.7%), implants (4.5%) and injectable (3.2%). The tested hypotheses showed a significant relationship between knowledge of family planning and the use of contraceptives and respondents who had knowledge were 2.63 times less likely to use contraceptive compared to those who were not knowledgeable (OR=0.38, 95%CI: 0.24-0.61). A significant relationship was also found between male involvement in family planning and the use of contraceptives and those who were involved in family planning were 1.98 times less likely to use contraceptive compared to those who were not involved (OR=0.505, 95%CI: 0.000). However, attitude towards family planning was not found to be significantly related to contraceptive use (χ^2 = 3.11, df = 1, p-value = 0.076). It was concluded that knowledge of contraceptives was not universal, male involvement in family planning is very low and the attitude individuals have in most cases does not translate to practice. There is therefore the need for public health practitioners and other Non-governmental Organizations to sustain efforts to raise awareness and motivation for proper contraceptive use.*

KEYWORDS: Family planning, Attitude, Knowledge, Involvement, Kalabari.

Comment [BT1]: The abstract should clearly show each section of the paper (introduction & objective, methods, results & discussion, and conclusion. However, the introductory paragraph is missing.

Comment [BT2]: Introductory paragraph that highlights male involvement in family planning should be included here.

Introduction

Nigeria is one of the world's most populous country and the most populous country in Africa. The population growth rate of Nigeria is also among the highest, with a growth rate of 3.24. This population is not sustainable given the prevailing economic situation due to the impact of COVID 19 in world's economy. This population would double itself in the next 23 years if nothing is done to curtail it. One way of curtailing the high growth rate is to increase contraceptive utilization among sexually active population. Low contraceptive utilization had its attendant problems such as high maternal mortality and morbidity, and high growth rate including non-sustainable population. In Nigeria for instance in every hundred thousand live birth there are about 576 maternal deaths (NPC, 2014). Low contraceptive uptake had been promoted by gender norms as contraceptive use is perceived as women's affairs in some quarters but are determined by the head of the family. Most males are in opposition to spousal contraception as they perceived contraceptive use by their partners to undermine the position of men as head of the family. In addition, willingness of husbands to approve contraceptive use had been implicated for fertility reduction. However, studies have shown that in patrilineal communities most men disapprove of their partner's use of contraceptives as the use of contraceptive is perceived to undermine the role of men and increase promiscuity; this has made some persons, the larger proportion been females to have unmet need for family planning.

Nigeria'scontraceptive prevalence rate was 17% (National Population Commission, 2018). However, there exist regional variation as rural areas were reported to having higher unmet needs (17%) than the urban areas (15%) in Nigeria. Studies on male involvement in family planning are concentrated in the South-western and Eastern geopolitical zones. There is a dearth of information on studies in family planning and male involvement in south southern political zone especially in the Kalabari areas.

Comment [BT3]: This should be summarized, and modified to ensure coherence (i.e. it should flow from general to specific). For instance, the first two paragraphs can be merged and summarized in few sentences.

Comment [BT4]: Reference?

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Male involvement includes the proportion of men who encourage and support their partners and their peers to use Family Planning (FP). Most family unit in Nigeria and elsewhere in Africa is essentially patrilineal and patrilocal, with the male partners having to take major decisions including those that can stop women from the uptake of contraceptive and other reproductive health issues (Ogunjuyigbe et al., 2009). Recent evidence has shown that reproductive health programmes are likely to be more effective for women when men are involved (Mistisk et al., 2003). Male involvement refers to all organizational activities aimed at men as a discrete group, which has the objective of increasing the acceptability and prevalence of family-planning practice of either sex (Green & Chens, 2003, Shisoka&Litali, 2015) in the family and the supportive role males play and their attitude towards contraception by their selves and that of their partners (Bayray, 2012).

Positive attitude influences uptake of services including family planning. Studies have shown that most men have negative attitude about women's choice and use of family planning. Some fear that family planning has the tendency of making wives independent of their control. Furthermore negative attitude of men is as a result of the belief their partners will have sex with other should they are no longer at risk of pregnancy (Population report USA, 2003, Kabagenyi et al., 2014) which could explain the current trend in the contraceptive prevalence in Nigeria.

Knowledge is a driver to uptake of family planning facility and the continuation of the services. A study in sub-urban and rural Nigeria showed that men's knowledge of and attitudes towards family planning is poor despite a global move to increase male involvement in reproductive health matters including family planning (Odu&Ijadunola, 2006) to help improve maternal and child health outcomes. This poor knowledge and attitude lead to a low contraceptive use.

This study therefore examinedknowledge, attitude and male involvement in family planning as predictors to the use of contraceptives in Kalabari communities of Rivers State.

Methodology

A descriptive cross-sectional design that examined knowledge, attitude and male involvement in family planning as predictors to the use of contraceptives in Kalabari communities of Rivers State was adopted.The population of the study consisted of all adult males aged 18 years and above in the three local government areas (?)that make up Kalabari Kingdom. With a population of ninety two thousand, twenty two (92022) males.A sample size of four hundred and forty was determined using the Yaro Yamane formula for a finite population. A 2-stage random sampling technique was used. The first stage is a simple random sampling technique to select electoral wards, the second stage a stratified random sampling technique where the sample are stratified based on wards and are selected using stratified proportional sampling techniques to select respondents for the study.

A semi-structured questionnaire consisting of five sections A-F was composed to extract information on the variables of the study. The researcher with the assistance of research assistants personally administered the instrument to the sample in the three local government areas that make up the Kalabari Kingdom. Section A addressed the socio-demographic characteristics of the respondents. It consisted of (5) items. Section B addressed knowledge of contraceptives. Section C addressed respondents' attitude towards contraceptive use. Section D addressed spousal communication on contraceptive use. Section F addressed Contraceptive Utilization.?Data collected was analyzed using Statistical Package for Social Science (SPSS) version 20 and data were presented using descriptive statistics to answer research questions and inferential statistics, such as binary logistic regression with a 95% confidence Interval (CI) at 0.05 significant level.

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Comment [BT11]: In general, the methodology part lacks clarity. See below specific comments.

Comment [BT12]: Is it facility based or population based (household) survey? You should describe this.

Comment [BT13]: Are you saying that male are your study participants? This should be clear.

Comment [BT14]: Good to mention them.

Comment [BT15]: What are the parameters? Prevalence? Confidence interval?
Better to describe these.

Comment [BT16]: What is electoral ward? How many population are included within it? Is this something related with strata? All this issues should be described to your readers.

Comment [BT17]: The sampling strategy is not clearly described.
How and how many study participants did you allocate sample for the three areas?
How did you select the respondents? If simple random or systematic sampling, you should tell us about the sampling frame.

Comment [BT18]: Is it self administered or interviewer administered face to face interview? Clearly descibe this.

Comment [BT19]: How did you manage the data (data cleaning, data entry)? This should be described.
What measures did you take to ensure data quality? This should be described.

Comment [BT20]: Ethical considerations? Please describe.

Results

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The results of the study are presented below:

Table 1: Contraceptive Utilization

Items	Frequency	Percentage
Ever used anything or tried in any way to delay or avoid having a child		
Yes	256	61.2
No	162	38.8
Total	**418**	**100.0**
Method used to delay or avoid having a child		
Withdrawal	29	11.9
Condom	67	27.5
Diaphragm	8	3.3
Daily pills	76	31.1
Postinor	56	22.9
Implants	5	2.0
Others **(injectable)**	3	1.2
Total	**244**	**100.0**
Age at which respondents used family planning method		
<20years	40	19.1
20-29	100	47.6
30-39	53	25.2
40 and above	17	8.1
Total	**210**	**100.0**
Mean age = 26.51±8.21		
Number of children at first usage of family planning method		
1	70	38.7
2	71	39.2
3	18	9.9
≥4	21	13.2
Total	**180**	**100.0**
Currently using any family planning method		
Yes	236	68.6
No	108	21.4
Total	**344**	**100.0**
Method of family planning method been currently used		
Withdrawal	39	16.5
Condom	53	22.5
Diaphragm	11	4.7

Comment [BT21]: Better to start with a paragraph that narrates the characteristics of study participants. You can bring the paragraph under table 1, here.

Comment [BT22]: Use appropriate table title.

Comment [BT23]: Who are your respondents? Male or female?
It is really confusing. You mentioned male as a study population in your method. But the variables seems about female respondent.

Daily pills	83	35.2
Postinor	31	13.1
Implants	11	4.5
Injectable	8	3.2
Total	**236**	**100.0**

Non responses excluded.

Table 1 indicated that 68.6% have ever used anything or tried in any way to delay or avoid having a child. The methods used were daily pills (31.1%), condom (27.5%), postinor (22.9%), withdrawal (11.9%), diaphragm (3.3%), implant (2.0%) and others such as injectable (1.2%). Close to half (47.6%) of the respondents used family planning method at age 20-29, 25.2% 30-39, 19.1% 10-19 and 8.1% 40 and above with a mean age of 26.51±8.21. More than one quarter (39.2%) of the respondents first used family planning after having two children, 38.7% 1 child, 9.9% 3 children and 13.2% first used it after having four children or more. 61.2% of the respondents currently use family planning method, the method currently used were daily pills (35.2%), condom (22.5%), withdrawal (16.5%), postinor (13.1%), diaphragm (4.7%), implants (4.5%) and injectable (3.2%). However, 34.5% indicated that they have intention to use family planning in the future while 65.5% did not have intention to use it in the future.

Table 2: Binary Logistic Regression analysis showing association between knowledge of family planning and the use of contraceptives

Knowledge	**Contraceptive use**		**Total**	**Df**	$\chi 2$	**p-value**	**Odds Ratio (OR)**	**95%CI**
	Yes F(%)	No F(%)						
Knowledgeable	141(75.8)	45(24.2)	186(57.4)	1	16.37	0.000*	Ref	
Not knowledgeable	75(23.1)	63(19.4)	138(42.6)				0.38	0.24-0.61
Total	216(66.6)	108(33.4)	324(100)					

* Significant.

On bivariate chi-square analysis the findings of the study shows a significant association between knowledge of family planning and contraceptive use. This was further subjected to Binary logistic regression to determine the predictability of knowledge on contraceptive use.

The analysis further showed a significant relationship between knowledge of family planning and the use of contraceptives. The result shows that respondents who are not knowledgeablewere 2.63 times less likely to use contraceptive compared to those who are knowledgeable (OR=0.38, 95%CI: 0.24-0.61). The null hypothesis which states that knowledge of family planning will not significantly predict contraceptive use is therefore rejected (p<0.05)(Table 2).

Table 3: Bivariate analysis showing association between attitude towards family planning and contraceptive use

Attitude	**Contraceptive use**		**Total**	**df**	$\chi 2$	**p-value**	**Odds Ratio (OR)**	**95%CI**
	Yes F(%)	No F(%)						
Positive	205(63.7)	98(30.4)	303(66.5)	1	3.11	0.076	Ref	
Negative	9(2.8)	10(3.1)	19(33.5)				0.43	0.17-1.09
Total	214(66.5)	108(33.5)	322(100)					

*Not Significant.

On bivariate chi-square analyze the findings of the study show a non-significant association between attitude towards family planning and contraceptive use ($\chi 2$ = 3.11, df = 1, p-value = 0.076). The null hypothesis which states that attitude towards family planning will not significantly predict contraceptive use is therefore accepted (p>0.05)(Table 3).

Table 4: Binary Logistic Regression analysis showing relationship between male involvement in family planning and the use of contraceptives

Male involvement	**Contraceptive use**		**Total**	**df**	$\chi 2$	**p-value**	**Odds Ratio (OR)**	**95%CI**
	Yes F(%)	No F(%)						
High	7(2.2)	-	7(2.2)	1	24.52	0.000	0.505	0.000
Low	209(64.5)	108(33.3)	317(97.8)				Ref	
Total	216(66.7)	194(33.3)	324(100)					

* Significant.

On bivariate chi-square analyze the findings of the study shows a significant association between male involvement in family planning and contraceptive use. This was further subjected to Binary logistic regression to determine the predictability of male involvement to contraceptive use. The analysis further showed a significant relationship between male involvement in family planning and the use of contraceptives. The result shows that respondents who were involved in family planning were 1.98 times less likely to use contraceptive compared to those who were not involved (OR=0.505, 95%CI: 0.000) (Table:

4). The null hypothesis which states that male involvement in family planning will not significantly predict contraceptive use is therefore rejected ($p<0.05$).

Discussion

The finding of this study showed that more half (61.2%) of the respondents currently use contraceptives.The finding of this study is similar to that of Huber and Ersek (2009) who also found that more than half of the respondents used contraceptives. The finding of this study is also similar to that of Islam (2008) were it was reported that more than half of the respondents were currently use contraceptive method. However, the finding of this study is at variance with the findings of the 2013 NDHS were 16% are current users of contraceptives. The increase in contraceptive use among study population may be attributable to expanding health services in Rivers State by building and equipment model Primary Health Centres in all the Local Government Areas in Rivers outside the Secondary Health centres popularly known as general Hospitals in Rivers State with functional service delivery system. Another reason that might have contributed to the increase prevalence is the contribution of the Federal Government of Nigeria in making contraceptive free and accessible in the country

The finding of this study showed that less than half (48.6%) of the respondents are knowledgeable about family planning. However, the binary logistic regression showed that knowledge of family planning significantly predicted contraceptive use and that respondents who had knowledge are 2.63 times less likely to use contraceptive compared to those who are not knowledgeable (OR=0.38, 95%CI: 0.24-0.61). The finding of this study corroborates that of Haile and Enqueselassie (2006) who found on a multivariate analysis that knowledge of family planning was significantly associated with contraceptive use (OR=2.4; 95%CI:1.5-3.9). The finding of this study is also in keeping with that of Endriyas, Eshete, Mekonnen,

Misganaw, Shiferaw and Ayele (2017) which showed on multivariate logistic regression analysis that having good knowledge of contraceptive was significantly associated with contraceptive use (AOR=15.51;95%CI:9.75-24.68**).** The similarity found in between the previous studies and the present one might be due to the technological advancement witnessed in the area.Knowledge is a driving force hence the result of the study.

The finding of this study showed that majority (94.1%) of the respondents had positive attitude towards contraception, but does not significantly predict contraceptive use. The finding of this study is at variance with the findings of the studies of Endriyas et al (2017) and Alemayehu, et al (2016) which showed that, having positive attitude towards contraceptives was significantly associated with contraceptive use. The population of the study might have explained this variance. For instance, in present study males are the population of the study where as the previous study used one females as the population of the study.

The finding of this study showed that, despite that more than 50% were involved in family planning, only 2.2% were highly involved. However, the result of the binary logistic regression showed a significant relationship between involvement in family planning and the use of contraceptives (OR=0.505, 95%CI: 0.000).Involving men has been predicted as a precursor to contraceptive use as males make major decisions that affect the health of the family which might have explained contraceptive use rate among the population

Conclusion

Conclusively, based on the findings of the study male involvement and knowledge are predictors to contraceptive use among the study population. Behaviour Change Communication should address the attitude towards contraceptives more especially in areas where the concerns are that contraception is a woman's business. These intervention should

address the collective benefits of contraception to mother, father, child and the society at large to the target population

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Knowledge of contraceptives was not universal. There is the need for health educators to design community based educational strategies to improve contraceptive knowledge among women as well as men.
2. Despite that contraceptive utilization was above 50%, a good percentage of the respondents did not use it. Hence, nurses as health professionals should continuously make better efforts to promote contraceptive practices among a variety of age groups emphasizing it not only during antenatal visits but also in other clinical visits.
3. Though contraceptives are made free by the government, a huge number of the population still do not use contraceptives.The government should closely monitor the accessibility of these contraceptives in the different health facilities in country to promote the use of modern contraceptive methods, especially those that are targeted towards the male population.
4. The positive attitude did not significantly predict contraceptive use. NGOs, CBOs and Researchers should design intervention programmes on attitudinal change in other to improve the attitude of the general populace

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