

Adoption and Utilization of Family Planning Services among Couples in Rural-Urban Communities in Oyo State, Nigeria

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Abstract

Modern contraceptive use among couples has been documented to be a highly effective means of improving maternal health by preventing unintended pregnancies and maternal morbidity. Nigeria has a high fertility rate and poor contraceptive usage, marred by social and economic dimensions with other cultural norms, including gender disparity. This paper presents the findings of a cross-sectional quantitative study exploring the adoption and utilization of family planning services among couples in rural-urban communities in Oyo State, Nigeria. Systematic sampling technique was used to select 570 women and men of reproductive age in Rural-urban communities of the Oyo state, using a 54 semi-structured questionnaire which included questions on socio-demographic characteristics, perception, socio-cultural factors, adoption, and utilization of modern contraceptive services. Of the 570 respondents, the mean age of the respondents was 30.3 ± 7.8 years. Most (63.3%) of respondents were females, while 36.7% were males. The most common family planning methods respondents and their spouses had heard injectable (21.2%), the male condom (18.6%), and implants (15.1%), IUD (13.4%), and pills (13.2%). Spousal support is 0.438 times more likely to influence utilization of modern family planning method and was statistically significant ($\beta = -0.826$, Odd Ratio [OR] = 0.438, $p < 0.05$). Similarly, stigmatization is 1.298 times more likely to influence the level of utilization of modern family planning methods ($\beta = 0.261$, Odd Ratio [OR] = 1.298, $p < 0.05$). It is important for government and family planning programmers to focus on programs that address stigmatization and effective spousal communication for improved modern contraceptive uptake.

Keywords: Adoption, Family Planning, Rural, Utilization, Urban.

Introduction

Nigeria is one of Africa's most populous countries [1]. It has high fertility of over 5 children by an average woman, while the use of modern contraceptives is low despite high knowledge of contraceptives [2]. Uptake of contraceptives has been marred by social and economic dimensions with other cultural norms, including gender disparity. Furthermore, urban residents are more likely to stop having children than those in rural areas. Generally, an average

Nigerian woman has about one child more than they desired [2], which implies that the current TFR is 15 percent higher than it would be if all unwanted births were avoided [2]. Several studies have shown gaps in family planning awareness and utilization, mostly due to poor awareness, fear of side effects, and other social and economic factors. Again, the perception remains a major challenge to the adoption of modern family planning methods [3].

The low uptake of contraceptives in Nigeria is

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likely to expose women to unplanned pregnancies, inadequate child spacing, and increased risks associated with closely spaced pregnancies and childbirth [2]. Given the crisis, children in poorly spaced births are more prone to malnutrition, diseases, and higher chances of death compared to those that are well spaced. This problem is likely to continue if the root causes are not identified and addressed. Understanding the factors that influence access to contraceptive use is key to reducing the disparities in family planning uptake and unmet needs for family planning across settings, including rural and urban areas.

Family planning has been proven to save and enhance the lives of women, children, and families. However, sub-Saharan Africans living in rural areas tend to use fewer contraceptives and have more children than their urban counterparts. Moreover, there continue to be widened gaps between awareness and the use of modern contraceptives.

A significant consequence of unwanted pregnancies is unsafe abortion. It is estimated that 1.25 million induced abortions were carried out in Nigeria in 2012, comparable to 33 abortions per 1,000 women of childbearing age in 2015 [4]. Improving access to modern contraceptives prevents unwanted pregnancies, some of which lead to unsafe abortion- a major cause of maternal mortality in Nigeria.

In 2018, the Global Family Planning Report revealed that Nigeria had recorded over 1.3 million unwanted pregnancies [4]. Low uptake of contraceptive methods is one of the leading factors contributing to high rates of unwanted pregnancies in Nigeria. Despite the widespread knowledge of contraception in Nigeria, only an abysmal 17 percent of currently married women use a contraceptive method while 12 percent of currently married women report using a modern contraceptive method, and unmet needs for family planning among currently married women is 19% [2, 5]. There is a disparity among rural and urban dwellers while the unmet need for FP is 20% among urban, it is low in rural with

a record of 19 percent [2, 6, 7]. This inequity is fueled by both a growing population and a shortage of family planning services, poor knowledge, and access to contraceptives. This affects the TFR, which tends to be higher among rural than urban communities.

Gender divide and poor male approval are important to modern contraceptive uptake. Many women are afraid and may not be able to start the conversation around family planning even when they desperately need to use modern methods for fear of being labeled as promiscuous. Unlike in developed countries where men play key roles in supporting their spouses to use contraceptive methods [3]. In a study, men's attitude was generally positive; however, only 51 percent of the men sampled in his research reported knowledge about Family Planning [8]. More males have been reported to disapprove of attending family planning clinics with their spouses; less than a quarter of men in Nigeria individually initiate discussions to address issues related to when to achieve pregnancy, avoid pregnancy or take up a contraceptive method [8, 9].

Oyo state is one of the 36 states of Nigeria, and it prides itself as a pacesetter state where most social and development programs started, including Family Planning programs. Over the past ten years, the State has enjoyed the support of many development partners that have implemented family planning programs; however, the use of modern contraceptives has remained poor, particularly so in rural settings. Oyo State has a total fertility rate of 4.5 %, with a contraceptive prevalence of 22.6 (any method) and 22.2% for modern contraceptives. This is a decline from 24.4% in 2013 to 22.2% in 2018% [2, 6, 7]. Apart from socio-cultural barriers, access to contraceptive methods is extremely poor, particularly among the rural populace. Modern FP services are mostly provided by public and private health facilities and, in some cases, mission health facilities, while some access FP services from patent medicine vendors, pharmacist traditional providers [2, 7].

In Oyo state, the contraceptive use among currently married women is more than two-thirds (89.3%), [2] as women reported that they decided jointly with their partners to use family planning. In addition, among currently married women who are non-users, almost three-quarters of them (70.9%) decided jointly with their partner not to use family planning [2]. Thus, the decision-making input of the male partners cannot be over-emphasized.

Despite huge investment in family planning by donors and development partners, modern contraceptive prevalence remains poor in Oyo state at just 22.6% compared to other South Western states of Nigeria [2]. Among women aged 15-49 who are not using contraception, the percentage of women who did not discuss family planning either with a fieldworker or at a health facility was very high (78.7%), with only 5% of women being visited by a fieldworker who discussed family planning in Oyo State [2]. There is robust research on family planning utilization among women in low-income countries, also many DHS report disparity in the knowledge and perception of contraceptives among women in rural and urban communities; however, there are few comparative studies on family planning acceptance and utilization among spouses (Men and Women of reproductive age) in rural and urban settings in Nigeria. This study examined the adoption and utilization of family planning among couples in rural-urban communities in Oyo state, Southwest area of Nigeria.

Methods

Description of the Study Area

Oyo State is one of the 36 states of Nigeria; it was carved out of the old western state in 1996. It is bounded by Osun, on the East and Kwara state by the North, Ogun on the south, and Benin republic on the West. It is occupied mainly by the Yoruba people who also speak the Yoruba language and has a population of about 8 million people, its main occupation is farming. There are 33 Local Government Areas (LGAs) in the state,

11 are in the urban while 22 are in the rural areas [10].

The study was conducted in 4 LGAs, 2 urban and two rural, these are:

Ibadan North-West Local Government Area

Ibadan North-West is an urban LGA with headquarter located in Dugbe/Onireke, Ibadan. It was carved out of the defunct Ibadan Municipal Government (IMG) on August 27, 1991, during the regime of former military President, retired General Ibrahim Babaginda. Its landmass extends to about 244.55km². This feature makes it one of the largest LGAs in Oyo State. It is bounded by Ibadan Northwest and Ido LGA in the North, by Oluyole LGA in the South, by Ido Local Government in the West, and by Ibadan North and South East LGA in the East. It has a population figure of 283,098 according to the results of the 2006 census released by the National Population Commission. The LGA has a total estimated population of 250,543, and the estimated population for people of the reproductive age is 55119 [10].

Ibadan South-East Local Government Area

Ibadan South-East is also an urban LGA in Oyo State, Nigeria. It was created on 27th August 1991 by the Federal Government and was carved out of the defunct Ibadan Municipal Government. The LGA covers an area of about 80.537 hectares of land. According to the 2006 census, Ibadan South-East LGA has a population of 266,457 2020 is 436,133 whilst the estimated population for people of reproductive age is 95949. The LGA has a total of 12 wards [10].

Kajola Local Government Area

The LGA located in the northern part of Oyo State covers an area of 609 km², and it is bounded in the south by Ibarapa LGA and Ogun State, in the east by Iseyin LGA, in the west by Iwajowa LGA and Republic of Benin, and in the northwest by Itesiwaju LGA. The 2006 census puts the GA population figure as 200,528 whilst

the project population for 2016 is 281,700. The total estimated population is 329,497, with reproductive age put at 72,489, and comprises 11 wards [10, 11].

Oyo West Local Government Area

Oyo West LGA is in the central of Oyo State. It bounds Atiba by the north, bounds Afijio by the south, bounds Iseyin by the west, and Oyo

East LGA. It covers an area of 505 km², and the headquarters of the LGA is Ojongbodu. Based on the 2006 census, the population census of the LGA is 136,457, and the projected population for 2016 is 191,700. The estimated population of the LGA for 2020 is 223,334, while the estimated population for people of reproductive age is 49133. The LGAs have ten (10) wards [10].

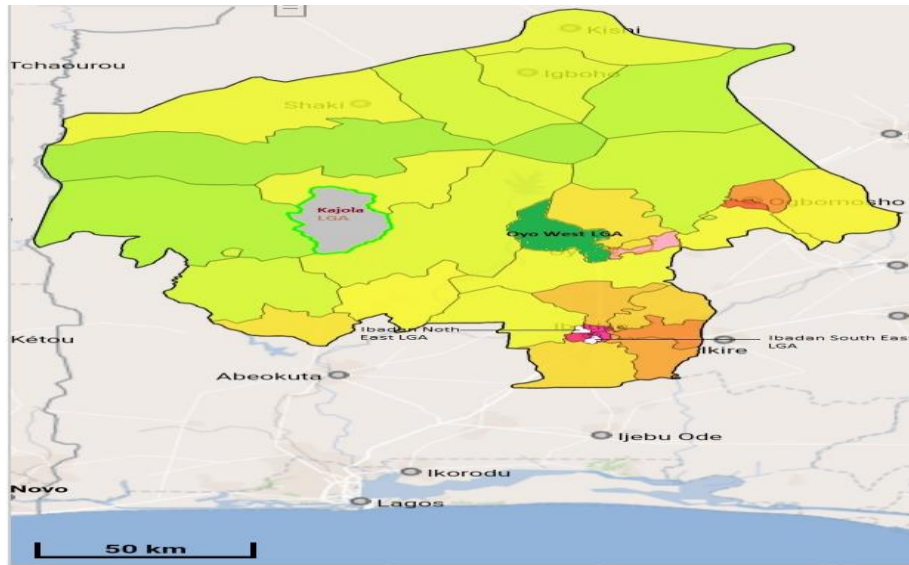


Figure 1. Study LGAs highlighted in Oyo state Map (City Map, 2020)

Study Design

This study is a descriptive cross-sectional study design. A descriptive cross-sectional study was used to assess related factors influencing the use of family planning among the study population. This type of study is usually used to describe the prevalence of variables of interest in a population.

Study Population

The study population consists of men and women of reproductive age between 18 to 49 years, including married adolescents and adults who have lived in the community for more than 2 years.

Inclusion Criteria

Men and women of reproductive age between 18 to 49 years who have lived in their communities for more than 2 years at the time of the study.

Exclusion Criteria

Men and women of reproductive age who are less than 18yrs or older than 50 years, who have not lived in their communities for more than 2 years at the time of the study or persons who are not clinically stable or not within the enumerated area were not considered.

Sample Size

Sample size determination

$$N = DZ^2Pq$$

d2

Where:

N = sample size.

D = design effect = 2.

Z = a constant at 95% precision = 1.96.

d = desired precision at 5 %.

q = 1 - p (1 - 0.219 = 0.781).

P = Contraceptive Prevalence Rate (CPR) in Oyo state = 22.6% (NDHS, 2018).

Therefore,

$N = (2 \times 1.96 \times 1.96 \times 0.226 \times 0.774) / (0.05 \times 0.05)$.

N~ 543.

$543 + (5/10 \times 543) = 570$.

N=570.

Results

Table 1 shows the socio-demographic profile of respondents in the study locations. Five hundred and seventy (570) participants across urban and rural communities (each accounted for 50%) were sampled for the study. The commonly occurring age group of respondents within the reproductive age bracket was aged 31-40 years (34.6%) followed by the age group 26-30 years (31.1%). The least age group was aged 41-49 years accounted for 16.7%. A large proportion (63.3%) of respondents who participated in this study were female compared to 36.7% male respondents. More than half (54.7%) of respondents' religion was Islam,

while below half (44.0%) of the respondents were practicing Christian religion at the time of the study.

The majority (83.7%) of the respondents were married compared to singles 13.7%. The divorced/separated and widowed were very minute (1.6% & 1.1%) respectively. With regards to the primary occupation of the respondents, the majority (39.8%) were traders, while one-fifth (20.4%) were self-employed. The highest educational qualification of most of the respondents was a secondary school (60.4%), followed by the tertiary level of education (18.4%). The study location was predominantly dominated by Yoruba people, and a large proportion (96.0%) of the respondents who participated in the study were Yoruba compare to Igbo (2.8%) and Hausa (0.9%).

Two in five (38.9%) of respondents already had 3-4 children, while two-thirds (34.4%) of the respondents already had 1-2 children. Approximately one in ten (11.8%) respondents had above 5 children prior to the survey, while 14.9% had no children as at the time of the survey.

Table 1. Socio-Demographic Characteristics of the Respondents

Characteristics	Frequency (N=570)	Percentage (%)
Location		
Urban	285	50.0
Rural	285	50.0
Age		
18-25	101	17.7
26-30	177	31.1
31-40	197	34.6
41-49	95	16.7
Gender		
Male	209	36.7
Female	361	63.3
Religion		
Christianity	251	44.0
Islam	312	54.7
Traditional	7	1.2
Marital Status		
Single	78	13.7
Married	477	83.7

Divorced/Separated	9	1.6
Widowed	6	1.1
Occupation		
Unemployed	6	1.1
Self employed	116	20.4
Artisan	99	17.4
Farming	6	1.1
Govt. Worker	38	6.7
Skilled job	66	11.6
Trading	227	39.8
Housewife	7	1.2
Others	5	0.9
Education		
None	6	1.1
informal	5	0.9
Primary	110	19.3
Secondary	344	60.4
Tertiary	105	18.4
Ethnicity		
Yoruba	547	96.0
Igbo	16	2.8
Hausa	5	0.9
Other	2	0.4
No of children		
None	85	14.9
1-2	196	34.4
3-4	222	38.9
5 & above	67	11.8

Table 2 shows the knowledge of respondents about the family planning method in the study locations. A large proportion (97.0%) of respondents had heard of family planning in the past. The majority (33.3%) of the respondents sourced information about family planning from health care providers, while 31.3% sourced their information from mass media – Radio, TV, or newspapers. Other respondents who sourced information about family planning from friends and relatives or social gatherings accounted for 13.8% and 10.6%, respectively. The majority (81.2%) of respondents' partners claimed they were already aware of family planning prior to the survey.

The most common family planning methods respondents and their spouses had heard injectable (21.2%), the male condom (18.6%), and implants (15.1%), IUD (13.4%), and pills (13.2%). The least family planning methods respondents were aware of comprised of spermicides (1.5%), female sterilization (1.5%), and vasectomy (1.3%). Approximately two in five (41.9%) respondents got to know about family planning when they were still single, and over one-third (37.7%) got to know about family planning after they have been married.

Prior to this survey, over two-thirds (69.3%) of respondents had discussed family planning with their spouses. Two-third (66.6%) of

respondents discussed family planning with their spouse purposely to avoid unwanted pregnancy, while 16.2% used family planning to prevent abortion. Over half (53.1%) of respondents who had not discussed family planning with their spouses claimed that it was unacceptable to discuss family planning with their spouses, while 38.9% claimed that they don't know how to discuss family planning with their spouses.

A large proportion of respondents had heard of family planning in the past, and the majority of the respondents sourced information about family planning from health care providers while others sourced their information from mass media. The most common family planning methods respondents and their spouses were aware of are injectable, male condoms, and implants.

Table 2. Respondents' Knowledge of Family Planning Method

Respondents	Frequency (N=570)	Percentage (%)
Ever heard of the family planning method		
Yes	553	97.0
No	17	3.0
*Respondents' source of information about family planning		
Health professional	396	33.8
Mass media (TV/Radio, Newspaper)	367	31.3
Internet	56	4.8
Friends & relatives	162	13.8
Spouse/partner	33	2.8
School	34	2.9
Social gathering	124	10.6
Respondents' partner aware of family planning		
Yes	453	81.2
No	52	9.3
Don't know	53	9.5
*Family planning method you or your partner is aware of		
I can't remember	29	1.9
Male condom	292	18.6
Female condom	121	7.7
withdrawal method	48	3.1
Spermicides	23	1.5
Pills	206	13.2
Injectable	332	21.2
Implants	236	15.1
IUD	209	13.4
Female sterilization	23	1.5
Vasectomy	21	1.3
Other methods	24	1.5
When respondents get to know about the importance of family planning		
When I was single	239	41.9
After I got married	215	37.7
After the birth of my last child	96	16.8
Don't know the specific time	9	1.6

At undergraduate days	11	1.9
Respondents had ever discussed family planning with spouse/partner		
Yes	395	69.3
No	175	30.7
Why respondents discuss FP with their spouse		
To avoid unwanted pregnancy	263	66.6
To prevent abortion	64	16.2
To ask for my husband permission to use FP	19	4.8
Health reason	9	2.3
To enable me to focus on my trade/job/career	40	10.1
Why respondents haven't discussed FP with your spouse		
I don't know how to discuss it with him/her	68	38.9
Afraid of being stigmatized	5	2.9
I am scared to discuss it with him/him	7	4.0
It is unacceptable to discuss it with him/her	93	53.1
Other reasons	2	1.1

*Multiple responses

Table 3 shows the utilization of family planning methods by respondents who participated in the study. As at the time of the survey, over half (54.9%) of the respondents were currently using one or more methods of family planning in the study locations. The majority of respondents adopted the injectable method of family planning (28.4%), followed by male condoms (23.5%). The least methods used were over half female sterilization and vasectomy (0.3%) each, 0.5% for spermicides, while the withdrawer method accounted for 2.2%.

Almost half (48.8%) adopted the family planning method to prevent unwanted pregnancy, while 34.3 % used family planning to prevent sexually transmitted diseases. Approximately 70.0% of respondents agreed to the decision of their partner to use the modern family planning method.

Almost half (48.8%) of respondents' choice of family planning method in both areas was basically to prevent unwanted pregnancies, followed by 34.3% of them who chose family planning to prevent sexually transmitted diseases.

A large proportion (86.0%) of respondents would recommend modern family planning to friends or relatives.

Respondents who were not interested in the use of the family planning method as at the time of the survey opined that they want more children (28.8%), while 23.0% were fearful of the side effect and 17.8% were of the view that family planning interferes with sexual pleasures.

More respondents in urban areas were currently using family planning methods than respondents in rural areas (61.8% vs. 38.2%) – table 4. Although there were more respondents in an urban area who used the family planning method than in rural areas of the study locations, respondents' utilization by duration – over 3 years usage in rural area was more than those in an urban area (55.5% vs. 50.6%) respectively - table 5.

Two-third (66.7%) of respondents used male condoms in urban areas compared to one-third (33.3%) respondents in rural areas. Almost three-quarters (73.7%) of respondents in urban areas used female condoms than slightly over one-quarter (26.3%) in rural areas. A large proportion (88.9%) in urban areas used pills than

in rural areas (11.1%), while implants were more used in rural areas (73.6%) than in urban areas (26.4%). There was no record of the utilization of sterilization methods in rural areas (0.0%),

unlike urban areas where (100%) use a broad range of family planning such as spermicides, female sterilization, and vasectomy, respectively.

Table 3. Respondents' Utilization of Family Planning Method

Respondents	Frequency (N=570)	Percentage (%)
Respondents currently using family planning method		
Yes	313	54.9
No	257	45.1
*Method of family planning respondents was using		
Male condom	87	23.5
Female condom	38	10.3
Withdrawal method	8	2.2
Spermicides	2	0.5
Pills	45	12.2
Injectable	105	28.4
Implants	53	14.3
IUD	30	8.1
Female Sterilization	1	0.3
Vasectomy	1	0.3
Reasons for the respondents' choice of family planning methods		
To prevent unwanted pregnancy	240	48.8
To prevent sexually transmitted diseases	169	34.3
It is available to use	33	6.7
I have a better understanding of the cost	23	4.7
Not costly	27	5.5
Respondent's spouse/partner currently using any modern family planning method		
Yes	216	37.9
No	354	62.1
Respondents agree to the decision of their partner to use the modern family planning method		
Yes	395	69.3
No	175	30.7
Respondents would recommend modern family planning method to someone else		
Yes	490	86.0
No	80	14.0
*Reasons respondents who were not interested in family planning method gave		
Fear of side Effect	71	23.0
Spousal disapproval	42	13.6
Lack of awareness	25	8.1
Cost	3	1.0
Distance to the health facility	1	0.3
Interferes with sexual pleasures	55	17.8
Against religion	22	7.1
Provider's attitude	1	0.3

Wants more children	89	28.8
*Reasons for Family planning rejection		
Fear of side effect	263	66.6
Spousal disapproval	64	16.2
Cost	19	4.8
Interferes with sexual pleasures	9	2.3
Against religion	40	10.1

*Multiple responses

Table 4. Respondents' Utilization of Family Planning Method by Location

Respondents currently using the family planning method	Yes	No	χ^2	df	p-value
	n (%)	n (%)			
Urban	176(61.8)	109(38.2)	10.78	1	0.001*
Rural	137(48.1)	148(51.9)			
Total	313(54.9)	257(45.1)			

*p<0.05

Table 5. Respondents' Utilization of Family Planning for the First Time by Duration

How long did it take respondents to start using family planning method(s)	6 months	About 1 year	1-2 years	Over 3 years	χ^2	df	p-value
	n (%)	n (%)	n (%)	n (%)			
Urban	26(14.8.)	28(15.9)	33(18.8)	89(50.6)	8.64	3	0.034*
Rural	8(5.8)	17(12.4)	36(26.3)	76(55.5)			
Total	34(10.9)	45(14.4)	69(22.0)	165(52.7)			

*p<0.05

Logistic regression was used to test associations between various factors that influence the usage of modern contraception in the study locations. The multivariate logistic regression analysis was used to test the degree of associations between independent and dependent variables assessed using odds ratios. The overall model in table 6 shows that the factors identified were good predictors of the

dependent variable – adoption and utilization of family planning in the study location ($\beta = -0.197, df = 1, p < 0.05$). The model was based on a dichotomous response variable – non-use (0) and use (1) and /or categorical explanatory variable(s), which are various factors influencing the use of the modern family planning method.

Table 6. Model

	Beta Coefficient	Standard Error	Wald Statistics	Degree of Freedom	P-value	Odds Ratio (OR)
Constant	-0.197	0.084	5.484	1	0.019	0.821

*P<0.05

Factor's analysis was used for dimension reductions of all the influencing factors through principal component analysis. Four influencing factors were identified by principal component, which was used to determine principal

component factors among the whole influencing factors of contraceptive use. The principal component identified factors, such as my husband, wife, or partner supports the use of modern contraceptives, family planning is

foreign to our culture, stigmatization by people for using family planning, unmarried adolescents and youths should not use contraceptives.

Considering the factors influencing the utilization of the family planning method in the study locations, the logistics regression model shows that there was a significant association between spousal or partner support and the utilization of modern family planning methods in the locations observed for the study. Thus, spousal support is 0.438 times more likely to influence utilization of modern family planning method and was statistically significant ($\beta = -0.826, \text{Odd Ratio [OR]} = 0.438, p < 0.05$).

There was a significant relationship between stigmatization for using family planning, and the level of utilization of modern family planning method in the locations observed for the study stigmatization is 1.298 times more likely to influence the level of utilization of modern family planning method ($\beta = 0.261, \text{Odd Ratio [OR]} = 1.298, p < 0.05$).

However, spousal or partner support in using modern family planning and stigmatization become strong factors that influence the level of utilization of family planning methods in the study locations.

Table 7. Logistics Regression Model of Factors Influencing the Usage of Modern Contraception.

Dependent variable: Currently using modern FP	Beta Coefficient	Standard Error	Wald Statistics	Degree of Freedom	P-value	Odds Ratio (OR)	95% C.I. for Odds Ratio	
							Lower	Upper
Constant	1.956	0.561	12.172	1	0.000	7.069		
My partner supports the use of modern FP	-0.826	0.095	76.129	1	0.000*	0.438	0.364	0.527
Family planning is foreign to our culture	-0.022	0.091	0.060	1	0.807	0.978	0.818	1.170
People will stigmatize me for using FP	0.261	0.123	4.481	1	0.034*	1.298	1.019	1.652
Unmarried adolescent/ youth should not use FP	0.059	0.079	0.548	1	0.459	1.060	0.908	1.238

*P<0.05

Considering the socio-demographic factors influencing the utilization of the family planning method in the study locations, the logistics regression model shows that there was a significant association between the number of children respondents had and the utilization of the modern family planning method in the locations observed for the study. Thus, the number of children of respondents is 0.706 times more likely to utilization and usage of modern family planning method and was statistically

significant ($\beta = -0.349, \text{Odd Ratio [OR]} = 0.706, p < 0.05$).

However, the number of children of respondents becomes strong influencing factors that influence the level of utilization of family planning methods in the study locations. Other socio-demographic factors such as age, gender, marital status, religion, occupation, level of education, and ethnicity of respondents were not significant factors that influence the level of utilization of family planning in Nigeria.

Table 8. Logistics Regression Model of Socio-demographic Factors Influencing the Usage of Modern Contraception

Dependent variable: Currently using modern FP	Beta Coefficient	Standard Error	Wald Statistics	Degree of Freedom	P-value	Odds Ratio (OR)	95% C.I. for Odds Ratio	
							Lower	Upper
Constant	1.108	0.825	1.805	1	0.179	3.029		
Gender	-0.002	0.195	0.000	1	0.992	0.998	0.681	1.463
Age	-0.019	0.118	0.026	1	0.872	0.981	0.779	1.237
Religion	0.075	0.169	0.198	1	0.656	1.078	0.774	1.500
Marital status	-0.111	0.200	0.305	1	0.581	0.895	0.605	1.326
Occupation	-0.076	0.043	3.142	1	0.076	0.927	0.852	1.008
Education	-0.115	0.126	0.838	1	0.360	0.891	0.697	1.140
Ethnicity	0.500	0.309	2.619	1	0.106	1.649	0.900	3.021
Number of children	-0.349	0.142	6.024	1	0.014	0.706	0.534	0.932

*P<0.05

Discussion and Conclusion

Considering the factors influencing the utilization of the family planning method in the study locations, the logistics regression model shows that there was a significant association between spousal or partner support and the utilization of modern family planning methods in the locations observed for the study. Thus, spousal support is 0.438 times more likely than the utilization of the modern family planning method and was statistically significant ($\beta = -0.826$, *Odd Ratio [OR]* = 0.438, $p < 0.05$).

Many studies corroborated the findings of this study on spousal support as important to family planning uptake. For instance, in a study [12], the researchers observed that majority of women in the study (50.3% and 33.3%, respectively) gave fear of troublesome side effects and husband's objections as reasons for not using family planning. Similar studies conducted among rural community dwellers in Cross River State in Nigeria where the question on "who makes the decision regarding family planning use" spousal support was the strongest predictor of birth control use (*OR* = 0.567; 95% *CI* = 0.391–0.821) suggesting that adoption of birth control is more likely when couples make a joint decision [13]. In other studies, joint household decision-making was also seen as a significant

contributor to modern contraceptive use [14, 15, 16, 17, 18].

Also, other studies found perception by male partners that health decisions should be made jointly was positively related to the use of modern contraceptive methods; the studies then concluded that communication between couples was important for partner's approval of contraceptive use. [14, 16, 17, 19, 20, 21].

Again, stigmatization was significant for not using family planning and level of utilization of modern family planning method in the locations; stigmatization is 1.298 times more likely to influence the level of utilization of modern family planning method ($\beta = 0.261$, *Odd Ratio [OR]* = 1.298, $p < 0.05$).

This observation validates several other studies which observed stigmatization as a major barrier to the use of contraceptives. In a study [22] among young women in Ethiopia, the study observed that 30 percent of the respondent agreed to anticipated stigmatization as a barrier to using family planning (unmet needs). Stigma was also mentioned as barriers to accessing family planning in other studies conducted in Nigeria [8, 9, 13].

In conclusion, the majority of the respondents are knowledgeable about family planning; however, usage is still low, and therefore programs that enhance increase uptake of Family

Planning services are highly recommended. Also, authorities at all levels should take into consideration the major barriers to Family planning service utilization and establish a sustainable system at both the state national level to improve the adoption and utilization of family planning services. A well-designed program that addresses stigmatization and spousal communication is imperative to effective family planning program implementation.

Citations

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family planning services among couples in rural-urban communities in Oyo State, Nigeria (Under review).

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Conflicts of Interest

The authors declare no conflicts of interest.

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