

Rural-Urban Disparities in the Acceptance and Adoption of Family Planning among Couples in Oyo State, Nigeria

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Abstract

Modern contraceptive use can enhance the living standard and reduce mortality among people living in rural and urban areas. However, contraceptive use tends to be low in the rural than the urban populace. A descriptive, cross-sectional study of systematic sampling technique was used to select 570 persons of reproductive age in the rural and urban communities of Oyo State. A semi-structured questionnaire on socio-demographic characteristics, knowledge, attitude and factors influencing uptake of modern contraceptives was administered to respondents. Of the 570 respondents, the mean age was 34.3 ±8.4 years. The majority (63.3%) were female compared to 36.7% male respondents. Most (97.0%) of respondents had heard of family planning in the past. The result shows significant differences in location, gender, marital status, occupation, ethnicity, and a number of children ($P < 0.001$). The majority (33.3%) of the respondents sourced family planning information from health care providers, while 31.3% sourced theirs from mass media – Radio, TV, or newspapers. Respondents in urban areas were currently using family planning methods than respondents in rural areas (61.8% vs. 38.2%). People in the urban area are 2.344 times the odds of utilizing any family planning compared to people in rural area (95% CI 1.495, 3.676). Urban and rural disposition to modern contraception services is influenced by economic, socio-cultural, environmental factors, location, age, educational, traditional beliefs, religion, family type, and level of knowledge. Although some signs of progress have been made in family planning at the communities, more work needs to be done. Men need to be actively involved, and other fears about family planning addressed.

Keywords: Acceptance, Disparity, Family Planning, Rural, Urban.

Introduction

One of the goals of the Sustainable Development Goals (SDGs) is promoting universal access to Sexual and Reproductive Health (SRH) services. Particularly, SDGs 3.7 and 5.6 is to promote family planning utilization among women and men of reproductive age [1, 2, 3]. Also, timely achievement of family planning targets is expected to hasten achievement across 5 SDG themes of People,

Planet, Prosperity, Peace, and Partnership [2]. Current reports on the global contraceptive prevalence rates and unmet needs for family planning indicate overall gains across countries [1]. However, some low-income countries are yet to set priorities on investing in Family planning.

Nigeria's population continues to increase despite huge investments in family planning programs by government and development partners. The rapidly increasing population of

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Nigeria over the past 50 years is of great concern as it has an impact on both the growth and development of the nation. Currently, Nigeria's population is estimated to be 198 million people [4], thereby maintaining her position as the most populous country in Africa and the seventh globally [5].

Nigeria is overwhelmed with a high growth rate resulting from the desire for more children, with a Total Fertility Rate of 5.3 children born by a woman throughout her reproductive years. Despite high contraceptive knowledge, contraceptive uptake remains poor [4]. The slow pace of family planning utilization also has disparities across the region while there remain high unmet needs for contraceptives- 19% among Women of Reproductive Age. Consequently, it is projected that with the continued rapid growth in population, the country is set to becoming the 3rd most populous country in the world by 2050 [6].

Nigeria has one of the world's worst health indices largely due to uncontrolled population. The maternal mortality ratio (MMR), which is an indicator of the overall health of the population, is 576 maternal deaths per 100,000 live births in Nigeria [4]. This places Nigeria as the country with the 2nd highest burden of maternal deaths worldwide. Evidence has shown a direct link between maternal and child health, as child survival depends on the mother's health and nutritional status. Key indicators of childhood mortality such as infant and under 5 mortality rates are 69 deaths/1000 live births and 128 deaths/1000 live births, respectively [4].

Additionally, a UNICEF report ranked Nigeria as 11th highest in newborn deaths with a neonatal mortality rate of 37 deaths per 1000 live births [7]. A causal link between infant (and child) mortality and fertility has been documented, which suggests that these childhood mortality indicators are significant impediments to fertility decline, particularly in Sub-Saharan Africa. Similarly, when fertility decreases, this results in reductions in infant mortality, allowing parents to channel more

resources to their children and an overall improvement in health and standard of living.

Problem Statement

Oyo State is in the South Western part of Nigeria, and it is one of the 36 states in the country. It has a long-standing history of family planning with ample donor support for family planning programs. However, the modern Contraceptive Prevalent Rate (mCPR) continues to dwindle from 18.8% in 2008, 24.4% in 2013, and 22.2% in 2018%. This comparably is lower than the average CPR of other states in the western region, which is 24.3%. Again, Oyo state has a high unmet need for family planning (30.6) compared with a national average of 19% [4]. Reasons for poor contraceptive uptake have been reported by many researchers ranging from poor access, cost, spousal disapproval side effect, amongst others [8, 9, 10].

Apart from socio-cultural barriers, access to contraceptive methods is extremely poor, particularly among the rural populace. Public and private health facilities mostly provide modern FP services and, in some cases, mission health facilities, while some access FP services from patent medicine vendors, traditional pharmacist providers [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 Oyo state, more than two-thirds (89.3%) of currently married 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 [4]. Thus, the decision-making input of the male partners cannot be over-emphasized. Despite this report, mCPR remains poor in Oyo state at just 22.6% for all methods compared to other South Western states of Nigeria. Among women age 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 [4], this obviously shows a gap in reaching women with information and services at the community level by the health care provider. Again, there is a disparity in rural acceptance and adoption of family planning or childbirth spacing practices in Nigeria.

Although there has been a steady but slow increase in the use of modern contraceptives over the past decade from about 10% in 2013 to 12% in 2018, with the use of implants increasing from 0% to 3%, the modern method-mix in Nigeria is predominantly implants, injectable, condoms, and Locational Amenorrhea Method (LAM). It is also important to note that 35% of currently married women who are not currently using contraception have the intention of using it in the future [4]. The use of contraception by men makes up a relatively small subset of the above prevalence rates. The modern contraceptive methods for men are limited to male condoms and sterilization (vasectomy) [11].

Literature Review

According to the World Health Organization (WHO), family planning is defined as “the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through the use of contraceptive methods, and the treatment of involuntary infertility” [11]. Family planning has been defined differently from many authors’ perspectives. However common phenomena are the ability of an individual to voluntarily determine the spacing and timing of their birth. Emphasis is on voluntarism, based on comprehensive, unbiased information received by potential users. Accessibility to contraceptives is also imperative to family planning uptake. Family planning may involve consideration of the number of children a

woman wishes to have, including the choice to have no children, as well as the age at which she wishes to have them. These matters are influenced by external factors such as marital situation, career considerations, financial position, and any disabilities that may affect their ability to have children and raise them. For people who are sexually active, family planning may involve the use of contraception and other techniques to control the timing of reproduction.

Abortion is not considered a component of family planning, as access to contraception reduces the need for abortion [12, 13]. Family planning allows spacing of pregnancies and can delay pregnancies in young women who may have an increased risk of health problems and death from early or late childbearing. Evidence suggests that women who have more than 4 children are at increased risk of maternal mortality. Family planning enables women who wish to limit the size of their families to do so. Other aspects of family planning include sex education, prevention, and management of sexually transmitted infections, pre-conception counseling and management, and infertility management [4].

Family planning is sometimes used as a replacement for contraception. However, it often involves methods and practices in addition to contraception. Additionally, there are many who might wish to use contraception but are not necessarily, planning a family (e.g., unmarried adolescents, young married couples delaying childbearing while building a career); family planning has become a household phrase for most people in this category. Contemporary notions of family planning tend to place a woman and her childbearing decisions at the center of the discussion, as women’s empowerment and reproductive independence have gained significance in many parts of the world. It is most usually applied to a female-male couple who wish to delay child bearing or limit the number of children they have and/or to control the timing of pregnancy (also known as spacing children). Family planning has been

shown to reduce teenage pregnancies and high birth rates for unmarried women [14, 15]. The study examined the disparities between urban and rural acceptance and adoption among couples in Oyo state.

Methods

Study Design

This study is a descriptive cross-sectional study design. This type of study design is used to assess the prevalence of variables of interest in a defined population at a specific period of time. We can measure factors influencing the variable of interest and use data obtained for researches and programs.

Study Population

Description of the Study Area

Oyo State is one of the 36 states of Nigeria, and 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, and 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.

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 [16, 17].

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 while the estimated population for people of reproductive age is 95949. The LGA has a total of 12 wards [16, 17].

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 LGA population figure as 200,528 while 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 [16, 17].

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 has ten (10) wards [16, 17].

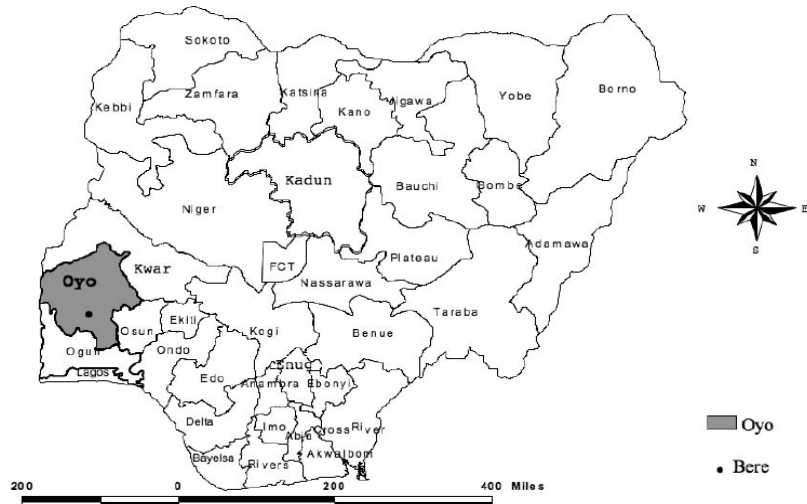


Figure 1. Map of Nigeria showing Oyo state (City Map, 2020)

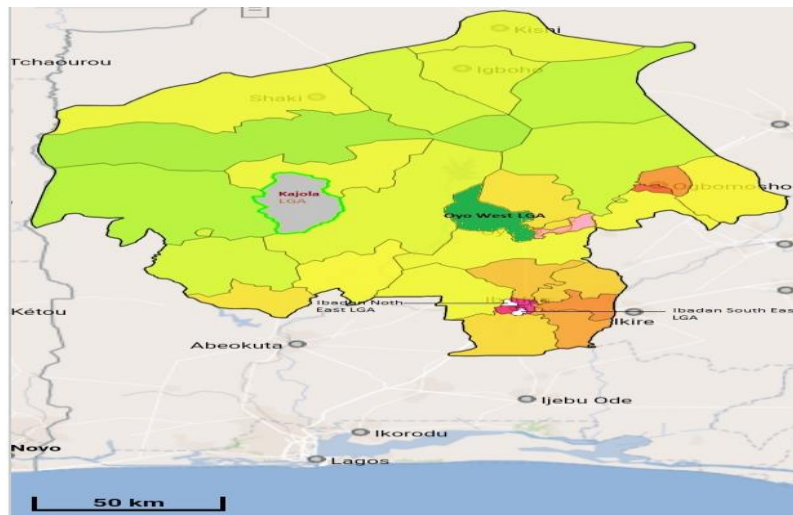


Figure 2. Study LGAs highlighted in Oyo state Map (City Map, 2020)

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 18 years 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

$$N = \frac{DZ^2Pq}{d^2}$$

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,

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

$N \sim 543$

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

Results

Of the Five hundred and seventy (570) participants across urban and rural communities (each accounted for 50%) were sampled for the study. Table 1 confirms that majority of the study population were males 53.7% in the rural and 46.3% in urban area while more female respondents in the urban area, there was however, significant difference by location ($P < 0.0001$). The study indicated that majority of the respondents were in their youthful age as 47.2% and 25-30 years, and 23.8% and 50.3% of the sampled population were between ages 31-

40 years and 25-30 years in rural and urban, respectively.

Majority (48%) of the respondents were married less than 5% of the respondents practice traditional religious, majority from the rural and urban were Christian (47.4% and 52.6%) and Muslim (52.6% and 47.4%) respectively. In terms of education, commonly, the respondents both in the rural and urban have secondary school education with 49.9% and 50.2% respectively. Both in the rural and urban area, majority of the respondents were traders, closely followed by government workers and self-employed (Table 1). The study also shows clearly that there is significant difference between location and gender, marital status, occupation, ethnicity, and number of children ($P < 0.001$).

Table 1. Socio-Demographic Characteristics

Variable	Rural (n=285)	Urban (n=285)	p-value
Gender			
Male	194 (53.7%)	167 (46.3%)	0.019
Female	91 (43.5%)	118 (56.5%)	
Age			
18-25	61 (60.4%)	40 (50.3%)	0.120
25-30	88 (49.7%)	89 (50.3%)	
31-40	93 (47.2%)	104 (52.8%)	
41-49	43 (45.3%)	52 (54.7%)	
Religion			
None	0 (0.0%)	1 (100.0%)	0.378
Christianity	119 (47.4%)	132 (52.6%)	
Islam	164 (52.6%)	148 (47.4%)	
Traditional religious	2 (33.3%)	4 (66.7%)	
Marital status			
Divorced	0 (0.0%)	3 (100.0%)	0.039
Married	245 (51.4%)	232 (48.6%)	
Separated	0 (0.0%)	6 (100.0%)	
Single	38 (48.7%)	40 (51.3%)	
Widowed	2 (33.3%)	4 (66.7%)	
Occupation			
Artisan	57 (57.6%)	42 (42.4%)	0.032
Farming	4 (66.7%)	2 (33.3%)	
Government work	14 (44.4%)	20 (55.6%)	
Housewife	3 (42.9%)	4 (57.1%)	

Other	0 (0%)	9 (100.0%)	
Self-employed	49 (42.6%)	66 (57.1%)	
Skilled job	38 (57.6%)	28 (42.4%)	
Trading	116 (51.1%)	111 (48.9%)	
Unemployed	2 (40.0%)	3 (60.0%)	
Education			
None	4 (66.7%)	2 (33.3%)	0.010
Other	1 (20.0%)	4 (80.0%)	
Primary	68 (61.8%)	42 (38.2%)	
Quranic	3 (60.0%)	2 (40.0%)	
Secondary	171 (49.9%)	172 (50.2%)	
Tertiary	38 (37.6%)	63 (62.4%)	
Ethnicity			
Hausa	0 (0.0%)	5 (100.0%)	0.003
Igbo	3 (18.8%)	13 (81.3%)	
Yoruba	280 (51.2%)	267 (48.8%)	
Other	2 (100.0%)	0 (0.0%)	
Number of Children			
1 – 2	79 (41.2%)	113 (58.9%)	0.001
1 - 2 years	0 (0.0%)	4 (100.0%)	
3-4	131 (60.4%)	86 (39.6%)	
3-4 years	0 (0.0%)	5 (100.0%)	
5 and above	33 (49.3%)	34 (50.8%)	
None	42 (49.4%)	43 (50.6%)	

Utilization of Family Planning Methods among Respondents

The majority (54.9%) of the respondents were currently using one or more methods of family planning in the study locations. Most respondents adopted the injectable family planning method (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%. Nearly 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.

Study participants in urban areas were currently using family planning methods than respondents in rural areas (61.8% vs. 38.2%) – table 2. Although there were more respondents in an urban area who used family planning method than in rural areas of the study locations,

but respondents' utilization by duration – over 3 years usage in rural area was more than those in urban area (55.5% vs. 50.6%) respectively.

Two-third (66.7%) of respondents used male condom 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 condom 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 family planning methods in rural areas (0.0%), unlike urban areas (100%) such as spermicides, female sterilization, and vasectomy, respectively.

Table 2. Respondents' Utilization of Family Planning Method by Location

Respondents currently using 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

Hypothesis Testing

Socio-cultural factors have a significant effect on the non-use of modern contraceptives among married men and women in rural and urban communities.

Table 3 shows the result of the hypothesis showed that fear of side, spousal disapproval,

and the fact that using modern-day conceptual is against respondent's religion contributed significantly to the non-use of modern-day contraceptives among married men and women in rural and urban communities in Oyo state (p<0.0001. Respondents believed that spouse disapproval or hesitancy has contributed to the lower uptake of modern contraceptives.

Table 3. Modern Contraceptive Use among Respondents

Modern contraceptive use	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Fear of side effect	0.029882	0.029527	1.01	0.013	-0.0284121	0.088177
Spousal disapproval	0.053372	0.034943	1.53	0.029	-0.0156148	0.122358
Lack of awareness	-0.00978	0.052783	-0.19	0.853	-0.113989	0.094428
cost	0.005254	0.119373	0.04	0.965	-0.2304212	0.240929
Interferes with pleasure	-0.05224	0.060485	-0.86	0.389	-0.1716551	0.067173
Against religion	0.124932	0.046042	2.71	0.007	0.0340333	0.21583
Want more children	0.022359	0.029143	0.77	0.444	-0.0351774	0.079895

Agreement with Partners to use Modern Day Family Planning and Recommendation to Others

Spousal agreement to use modern-day family planning plays an important role to uptake. It is clear from Figure 3 that over 67% in both rural and urban settings mentioned that their spousal agreed to use modern family planning method.

As shown in Figure. 4, the majority (83%) of the respondents in both rural and urban mentioned that they can recommend family planning to others. Regarding the type of family planning methods that can be recommended in the urban area, the following were the top three – spermicides, vasectomy, pills, and withdrawal methods. In the rural area, the top were implants, female condom, and injectables.

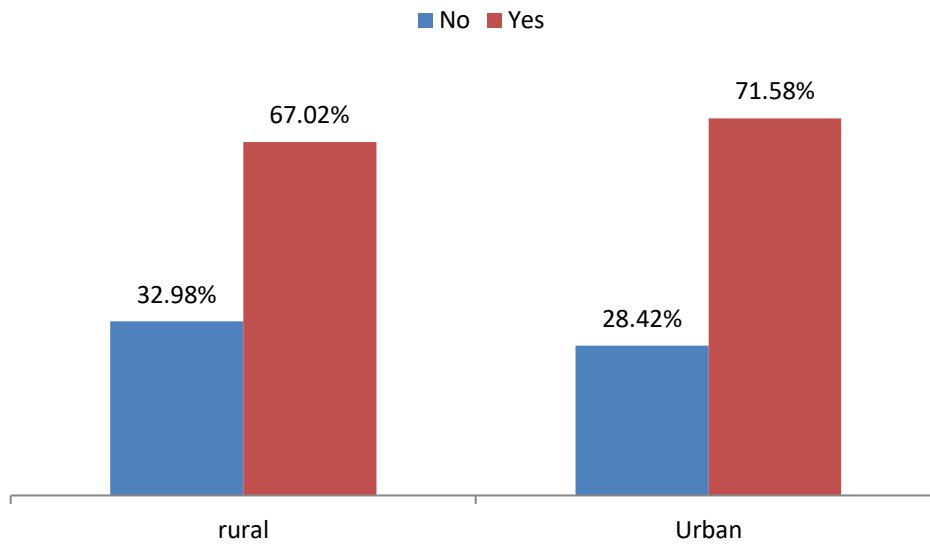


Figure 3. Spousal Agreement to use Family Planning

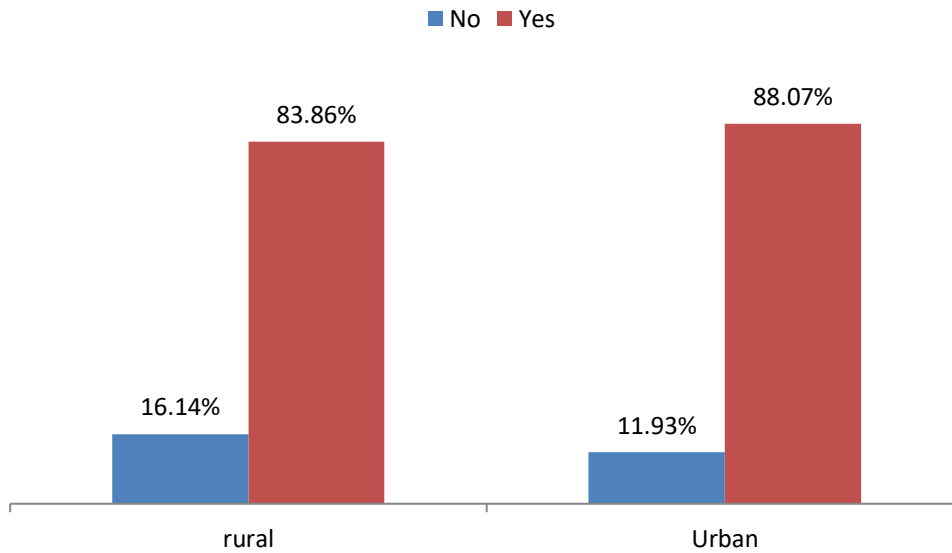


Figure 4. Can you Recommend Family Planning to Others

Table 4 below shows the type of family planning method that would be recommended by either rural or urban to family members. At the

urban community's withdrawal method was recommended while implant ranked highest on a recommendation at the rural areas.

Table 4. Type of Family Planning Method to Recommend

	Rural	Urban
Male condom	39.66%	60.34%
Female condom	60.47%	39.53%
Withdrawal method	14.29%	85.71%
Spermicides	0.00%	100.00%
Pills	20.00%	80.00%
Injectable	48.43%	51.57%
Implants	68.27%	31.73%

IUD	27.40%	72.60%
Female sterilization	0.00%	100.00%
Vasectomy	0.00%	100.00%

There is a significant different in the perception level of modern family planning methods among men and women of reproductive age in rural and urban communities in Oyo state.

Table 5 below showed the p-value (<0.0001); this implies a significant difference in perception level of modern family planning methods among men and women of reproductive age in rural and urban communities in Oyo state.

Table 5. 95% Confidence Interval on the Difference Between the Means

[0.485,	0.574]
Difference	0.530
t (Observed value)	23.420
t (Critical value)	1.964
DF	569
p-value (Two-tailed)	< 0.0001
Alpha	0.05

Hypotheses Testing

Socio-cultural factors have a significant effect on the use of modern contraceptives among

married women and women in rural and urban communities.

Table 6. Social Cultural Factors Affecting Uptake in Rural and Urban Communities

Modern contraceptive use	Coef.	Std. Err.	T	P>t	[95% Conf.	Interval]
Fear of side effect	0.029882	0.029527	1.01	0.013	-0.0284121	0.088177
Spousal disapproval	0.053372	0.034943	1.53	0.029	-0.0156148	0.122358
Lack of awareness	-0.00978	0.052783	-0.19	0.853	-0.113989	0.094428
cost	0.005254	0.119373	0.04	0.965	-0.2304212	0.240929
Interferes with pleasure	-0.05224	0.060485	-0.86	0.389	-0.1716551	0.067173
Against religion	0.124932	0.046042	2.71	0.007	0.0340333	0.21583
Want more children	0.022359	0.029143	0.77	0.444	-0.0351774	0.079895

There is a significant difference in the knowledge level of modern family planning

methods among men and women of reproductive age in rural and urban communities in Oyo state.

Table 7. 95% Confidence Interval on the Difference between the Means

[1.057,	1.185]
Difference	1.121
t (Observed value)	34.591
t (Critical value)	1.964
DF	569
p-value (Two-tailed)	< 0.0001
alpha	0.05

There is a significant difference in perception level of modern family planning methods among

men and women of reproductive age in rural and urban communities in Oyo state.

Table 8. 95% Confidence Interval on the Difference Between the Means

[0.485,	0.574]
Difference	0.530
t (Observed value)	23.420
t (Critical value)	1.964
DF	569
p-value (Two-tailed)	< 0.0001
alpha	0.05

Family Planning Service Quality in Rural and Urban Area

Table 9 shows that 3 (1.1%) of the respondents in the rural area strongly disagreed that family planning clinics are opened for services all the time, 6 (2.1%) disagreed that family planning clinics are opened for services all the time while more than half of the respondents in the rural area 161 (56.5%) agreed that family planning clinics are opened for services all the time, 60 (21.1%) strongly agreed that family planning clinics are opened for

services all the time while 55 (19.3%) were indecisive.

On the other hand, 3 (1.1%) of the respondents in the urban area strongly disagreed that family planning clinics are opened for services all the time, 28 (9.8%) disagreed that family planning clinics are opened for services all the time, 135 (47.4%) agreed that family planning clinics are opened for services all the time, 55 (19.3%) strongly agreed that family planning clinics are opened for services all the time while 64 (22.5%) were indecisive.

Table 9. Respondents' Responses on the Accessibility to Family Planning Service at Family Planning Unit

		Type of settings		
		Rural	Urban	Total
46. Family planning clinic is opened for services all the time- Morning and evening	Undecided	55 (19.3%)	64 (22.5%)	119 (20.9%)
	Strongly disagree	3 (1.1%)	3 (1.1%)	6 (1.1%)
	Disagree	6 (2.1%)	28 (9.8%)	34 (6.0%)
	Agree	161 (56.5%)	135 (47.4%)	296 (51.9%)
	Strongly agree	60 (21.1%)	55 (19.3%)	115 (20.2%)
	Total	285 (100.0%)	285 (100.0%)	570 (100.0%)

As shown in table 10, 53 (18.6%) of the respondents in the rural area strongly disagreed that most family planning facilities do not have adequate family planning methods, 92 (32.3%) disagreed that most family planning facilities do not have adequate family planning methods, 33 (11.6%) agreed that most family planning facility do not have adequate family planning methods, 28 (9.8%) strongly agreed that most family planning facility do not have adequate

family planning methods while 79 (27.7%) were indecisive.

Consequently, table 10 also showed that 55 (19.3%) of the respondents in the urban area strongly disagreed that most family planning facilities do not have adequate family planning methods, 104 (36.5%) disagreed that most family planning facilities do not have adequate family planning methods, 41 (14.4%) agreed that most family planning facility do not have

adequate family planning methods, 13 (4.6%) strongly agreed that most family planning

facility do not have adequate family planning methods while 72 (25.3%) were indecisive.

Table 10. Respondents' Responses on the Adequacy of Family Planning Methods at Family Planning Unit

		Type of settings		Total
		Rural	Urban	
Most family planning facility do not have adequate family planning methods	Undecided	79 (27.7%)	72 (25.3%)	151 (26.5%)
	Strongly disagree	53 (18.6%)	55 (19.3%)	108 (18.9%)
	Disagree	92 (32.3%)	104 (36.5%)	196 (34.4%)
	Agree	33 (11.6%)	41 (14.4%)	74 (13.0%)
	Strongly agree	28 (9.8%)	13 (4.6%)	41 (7.2%)
	Total	285 (100.0%)	285 (100.0%)	570 (100.0%)

The study also confirms that no respondents in the rural area strongly disagreed that the attitude of the family planning providers were good, 3 (1.1%) disagreed that the attitude of the family planning providers were good, more than half of the respondents in the rural area 145 (50.9%) agreed that the attitude of the family planning providers were good, more than one-third of the respondents 74 (26.0%) strongly agreed that the attitude of the family planning providers were good while 63 (22.1%) were indecisive. Three of the respondents in the urban area strongly disagreed that the attitude of the family planning providers was good. Only one respondent in the urban area disagreed that the attitude of the family planning providers were good, more than half of the respondents in the

urban area 159 (55.8%) agreed that the attitude of most family planning providers were good, 13 (4.6%) strongly agreed that the attitude of the family planning providers were good while 72 (25.3%) were indecisive.

Determination of the Statistical Difference in the Level of Knowledge of Modern Family Planning Methods among Couples between Rural and Urban Settings using Chi-Square Test

Table 11 depicts that the null hypothesis, which states that there is no statistical difference in the level of knowledge of modern family planning methods between couples in rural and couples in urban is rejected at $p = 0.000$, Pearson chi-square = 27.731.

Table 11. To Determine the Statistical Difference in the Level of Knowledge of Modern Family Planning Methods among Couples between Rural and Urban Settings using Chi-Square Test

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.731a	7	0.000
Likelihood Ratio	35.506	7	0.000
N of Valid Cases	570		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is .50.

Most of the respondents in the rural area (87.7%) claimed that the adoption of family planning prevents unplanned pregnancy, 61 (21.4%) of the respondents claimed that the adoption of family planning prevents sexual transmitted diseases, 93 (32.6%) responded that the adoption of family planning promotes health

and wellbeing of the family while 48 (16.8%) responded that the adoption of family planning reduces that level of poverty in the country.

The majority (90.9%) of the respondents in the urban area claimed that the adoption of family planning prevents unplanned pregnancy, 68 (23.9%) of the respondents claimed that the

adoption of family planning prevents sexual transmitted diseases, 91 (31.9%) responded that the adoption of family planning promotes health and wellbeing of the family while 62 (21.8%) responded that the adoption of family planning reduces that level of poverty in the country.

Second Hypothesis of the Research Study

Table 12 depicts that at two-tailed test, the adoption of modern family planning methods

Table 12. To Test Hypothesis(H_{01}) using non-parametric Mann-Whitney Test

How long ago did you start using family planning method for the first time?	
Mann-Whitney U	33327.000
Wilcoxon W	74082.000
Z	-3.968
Asymp. Sig. (2-tailed)	0.000

Discussion and Conclusion

The study shows various disparities between urban and rural acceptance and acceptance of family planning services. Individuals' attitudes for family planning methods are influenced by some characteristics, such as economic factors, socio-cultural factors, environmental factors, location, age, educational, traditional beliefs, religion, family type, and level of knowledge. This study shows awareness and adoption of modern family planning among residents in Urban and rural areas were both high and higher in Urban than in rural areas. In terms of knowledge of family planning benefits, more respondents in urban (90.9%) are knowledgeable that family planning prevents unplanned pregnancy than their counterparts in rural areas (87.7%). Several studies have alluded to the findings in this study on the disparity in awareness and knowledge of family planning between rural and urban areas. NDHS [4] reports that more people in the urban areas are more aware of and utilize family planning than the rural areas. Similar studies conducted revealed that religion, education, cultural factors, level of exposure, employment status, and influence the

among couples in urban areas was statistically significantly higher than the couples in rural areas ($U = 32347.5$, $p = 0.000$) hence the null hypothesis (H_{01}) i.e., there is no statistical significant difference in the level of adoption of modern family planning methods among couples between rural and urban settings using non-parametric Mann-Whitney test is rejected.

practice of family planning in Nigeria [18, 19, 20].

The reasons for differences in contraceptive adoption are obvious and can be alluded to the concentration of social amenities such as education, access to health services including family planning services and information in the urban areas [21, 22], Corroboratively, a study conducted in Karnataka India found that that contraceptive use was higher in urban areas than rural areas (67% versus 51.66% respectively) and concluded that this finding could be as a result of awareness, availability, and accessibility of contraceptives which are better in the urban areas than in the rural areas [23], this revelation was also highlighted by Nigeria NDHS report where demand for Family planning is lower in Rural than Urban areas, with 20% unmet needs in Urban and 18% in rural respectively [4].

Certain socio-demographic factors have been found to be positively associated with the adoption of family planning. Particularly, the level of education and wealth quintile [23]. The finding of education and being from the richest household as factors that influence modern contraceptive use may be because well-educated

women and those from wealthy homes are well informed and able to make decisions independently. In addition to women's education and wealth index of the household, it was noted that place of residence, age at first cohabitation, current age of the respondent, woman's working status, number of living children, husband's desire for more children, religious affiliation, access to health facilities, exposure to contraceptive information in media and by family planning workers, and current age of husband or partner were determinants of contraceptive use among ever married women in Rwanda [24].

Again, individual perception, place of residence, education wealth quintile, and partner's approval and exposure to family planning information play a significant role in contraceptive uptake. For instance, the role of individual and community normative as a factor in contraceptive use in Mali observed that education and wealth quartile play a significant role in contraceptive adoption. This also aligns with the findings in this study [25].

Similarly, a cross-sectional study in rural Zambia on the determinants of modern contraceptive use among married women of reproductive age established that married women of reproductive age in rural Zambia with higher education, richest wealth quintile, having high parity and family planning information, use more modern contraception method [26].

Other studies found that 85.7% of rural women of childbearing age in the Democratic Republic of Congo did not use any modern contraceptive methods due to socio-cultural and religious factors, husband's disapproval, high cost, and fear side effect [27, 28]. In Nigeria, a study conducted among rural women in Abakaliki to determine barriers to family planning acceptance observed that majority of women (50.3% and 33.3% respectively) gave reasons of side effects and husband's disapproval for the non-use of family planning methods while a few of them (8.2%) gave reasons of religion and cultural barriers [29].

Generally, in this study setting (rural and urban), the adoption of family planning is better when couples make a joint decision. The important role men play in uptake of family planning has been established by other studies. In a study among rural dwellers in the River State of Nigeria, it was affirmed that the husband's decision was a predictor to the use of family planning [30]. In addition, perception by male partners that decisions regarding health should be made jointly was positively related to the use of recent contraceptive methods [31, 32, 33, 34, 35].

Conclusion and Recommendation

Although some progress have been made in family planning at the enumerated communities of this study. A lot more work needs to be done, and a lot will be achieved if new programs are designed to actively involve the men and address other identified fears among women and men about family planning.

The greatest fears that prevented most of the women from accepting family planning were fear of side effects, husband's disapproval, and stigmatization. These are genuine concerns that should be fully addressed by the family planning program to improve uptake of family planning. That these fears persisted, as seen in many research outcomes, is worrisome and needs a more innovative approach to addressing these issues. More bothersome is the fact that the majority of our study participants learned about family planning from health workers and the media, yet their perceptions changed a little. It is either that the health workers and the media are not doing enough to properly inform and convince the women on the fact that the side effects of family planning occur in only a minority of users and is not significant compared to the huge benefits of family planning or there is an alternative source of information that hype these side effects which the women trust. Some studies have found that peers, other community members, social media, and other informal sources have all constituted channels through

which women learn of family planning. In addition to the serious possibility that they are bound to give women wrong information about family planning, they are most likely to hype the side effects and complications out of proportion. Certainly, women trust the information they get from these sources, and these have been found to influence women's decisions on family planning most often negatively.

Citations

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Family planning services among couples in Oyo state, Nigeria.

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Conflicts of Interest

The authors declare no conflicts of interest.

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