

# Accessibility and Utilization of Family Planning Services Among Married Couples in Kogi State, North Central Nigeria

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**Abstract:** Family Planning serves several purposes, including, the reduction of maternal and infant morbidity and mortality rates, sustainable population growth rate, improved economy security for both family and community and treatment of infertility among others. Despite these huge benefits, many factors stand to impede on the practice. This cross-sectional community-based survey examined the access and utilization to family planning services (contraceptive use) and the factors serving as impediments to the overall use among married couples in the purposively selected Local Government Area of Kogi State, North Central Nigeria. The survey adopted both qualitative and quantitative methods and the data were analyzed using Frequency counts, Pearson Chi-square and Linear regression statistics in a Statistical Package for Social Sciences (SPSS Version 25.0) environment. The survey recorded a high level of awareness and access to family planning services across the state; however, this did not translate to its uptake. Factors found to influence this result include, perceived side-effects, friends' disapproval, age, culture and poor level of education among others. Also, the study found a positive association between couples' level of awareness, availability of family planning methods/services and husbands' involvement (Chi-Square Tests ( $X^2$ )=23.991;  $df=1$ ;  $p=0.000$  Chi-Square Tests ( $X^2$ )=63.404;  $df=6$ ;  $p=0.000$ ; Improved family health  $\beta=0.270$ ,  $t=6.120$ ,  $p\text{-value}=\leq 0.000$ ; attendance of school by children  $\beta=0.180$ ,  $t=4.229$ ,  $p\text{-value}=\leq 0.000$ ; experience of fewer pregnancy  $\beta=0.091$ ,  $t=2.189$ ,  $p\text{-value}=\leq 0.029$ ; improved socio-economics status and well-being  $\beta=0.080$ ,  $t=2.037$   $p\text{-value}=\leq 0.042$ ) respectively in the uptake of the service in the state. However, the availability of family planning methods was found to be strongly associated (63.4%) with the uptake of the services. Therefore, the low level of utilization of family planning in Kogi State among the (49.0%) may be responsible for about (30.5%) who reported terminating an unwanted pregnancy. Not only does this add to the rate of maternal mortality, but the socio-cultural, economic and psychological impact on the women, their families and the entire community can be quite devastating. Therefore, it was recommended among others, that women in their reproductive age be sensitized on the need to maximize the practice of modern family planning methods. Also, increase on the access to contraceptive methods through joint efforts of government and non-governmental agencies to reduce the unmet needs for contraceptive use in the state are encouraged.

**Keywords:** Family Planning, Access, Contraceptive, Uptake, Services, Married Couple

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## 1. Introduction

Family planning is the decision to determine the number of children one wants to have, the spacing and the age to have

children or the decision not to have any. To end preventable deaths during pregnancy and childbirth, family planning services serve this purpose. Through medical and social activities internalized by sexually active individuals, the

control/management of issues of procreation, sexually transmitted diseases and infertility is addressed. Often time, this decision is influenced by such factors as marital status, financial position, career, and belief system, ethnicity, gender, age, amongst others. The practice of modern family planning services which include, use of contraceptive, Assisted Reproductive Technology (ART) and family planning programs, could prevent unwanted pregnancies leading to abortion, control unsustainable population growth, prevents maternal deaths and infant mortality, prevents sexually transmitted diseases, and empowering of people [1].

Evidence shows that, about 214 million women of reproductive age in the less developed countries do not use modern contractive methods, resulting to about 99% of maternal deaths, with sub-Saharan Africa and Asian countries contributing almost half of the estimated figures [2]. Globally, the report further indicates maternal mortality rate from related pregnancy and childbirth of approximately 810 daily, of which about 94% occurred in the less developed countries.

The risk of maternal death is higher among women in the developing countries compared to those in the developed countries with statistics indicating 1 in 45 versus 1 in 5400 respectively. However, the Fragile State Index (FSI) conducted on 178 countries on the assessment of risk vulnerability, shows 15 countries comprising three continents of Africa, South America and Asia as most fragile states, in other words high alert states [3]. With the young adolescents as group mostly affected as they are at higher risk of complications resulting from pregnancy as they are less likely to make use of family planning services, given the social and cultural constraints that prevent them [4]. This indicate that, services are likely lacking in these regions, therefore the urgent need to focus attention in reducing the rates of mortality and improving on the livelihood of the people by getting them involved in the family planning programs.

Importantly, is the alarming rate of deaths associated with pregnancy on the rise, even though they could be prevented by proper practices of family planning methods, various factors stand to affect its practice. Foremost are the unmet needs of contraceptives especially in the less developed countries. Although, modern methods are intended to address some of the outcomes associated with pregnancy and childbirth, however the lack of education on it benefits stands as a major deterrent where these services are available.

To address the unmet needs for family planning services across the high priority countries, a cost estimation of about \$68.5 billion. Meeting this needs of the 'high alert' countries is the fastest way of achieving the 2030 17 Agendas of the Sustainable Development Goals which depends on the fulfillment of the sexual and reproductive health and rights of all women and young people [5].

Reports so far have shown an increase in the use of modern methods of contraception among these countries, with statistics indicating a rise from about 46 million recorded in 2012 to more than 317 million in 2018 [6]. With

this increase, the report further indicates a decline in gap between the rural and urban areas in the access and use of the services. With more countries providing more than one form of contraception, this implies the large involvement of the people. The level of uptake achieved so far is through the investment in the supply of contraceptives mostly by non-governmental agencies. Noteworthy is the supports from Bill and Melinda Gates foundation and UNFPA in 2018 in the supply of reproductive health commodities in some of the countries with unmet needs including countries in West Africa.

In Nigeria, given the increasing population growth with a recent estimation at over 200 million, the Nigerian Demographic and Housing Survey [7] reports that the median age of childbirth among women between the ages of 25-49 years who had live births in the years preceding the survey is 20.2 years. With the country's total fertility rate at 5.5 per woman, it is ranked the highest in the world, thus implying number of live births being more than desired for a sustainable population growth [7]. This population boom could be checked with the practice of family planning services; however, the current level of practice is very low at about 13% and 15% for all methods in 2008 and 2013 respectively [8, 7]. According to the reports, although the knowledge on the benefits of use of contraceptive method is quite high, at about 85% to 95% between women and men respectively, the low practice is a thing of concern.

In Kogi State, a report states that, although the state boost of about 247 family planning clinics, however it has the lowest adoption rate within the middle melt region, of about 20.9% for any contraceptive method, 14.7% for modern methods and 6.2% for traditional methods [9]. Besides the unmet needs for the services in the state, other determinants in the usage and adoption according to a study conducted in Lokoja, the State capital, include age, marital status, religion, and educational level [10].

Whereas, the level of education of women as well as that of their spouse has been reported to greatly increase the probability of contraceptive use, a major factor affecting the current level of the use of family planning methods in the state has been linked to the role of men in decisions on pregnancy and childbirth [11]. Although there have been reports to an increase in the use of contraceptives in the state over the past three years, mainly due to the trending economic hardship, the adoption level notwithstanding is not proportional to the reported current rate of fertility in the country.

This study, therefore, sought to examine the level of couples' awareness and the influencing factors in the access and utilization of family planning services among married couples in Kogi State, North Central Nigeria with a view to providing relevant data for policy documents, interventions, and amongst others.

The study was guided by the following hypotheses;

1. There is no significant relationship between couples' awareness of family planning services and utilization.
2. There is no significant relationship between type of

family planning methods and utilization of services among couples.

3. Benefits of men involvement in family planning does not influence the utilization of family planning services.

## 2. Materials and Methods

A Community-based survey was carried out in the purposively selected Local Government Areas (LGAs) of Kogi State (Table 1). From the 21 Local Government Areas in the State, for every three LGA one was selected. Therefore, 3 LGAs were selected from Kogi East and 2 each from Kogi Central and Kogi West. Two (1 town and 1 village) communities were selected from each LGA (the headquarters and one rural community at about 10 - 20 km away from the Headquarters).

**Table 1.** Sample Size determination for the Study.

s/n	LGA	Communities	Household Head Population	Sample Size
1	Idah	Idah	687	69
		Ega	234	23
2	Ankpa	Ankpa Town	2453	245
		Ogaji	245	24
3	Bassa	Oguma	541	54
		Sheria	187	19
4	Kabba	Kabba Town	2,546	254
		Otu	213	21
5	Yagba West	Odo Ere	1482	148
		Odo Eri	352	35
6	Ogori-Mangogo	Ogori	628	63
		Magongo	219	22
7	Adavi	Ogaminana	1817	182
		Eika	261	26

Source: Adapted from NPC/ICF 2014.

A number of survey instruments were designed appropriately for the different assessments and respondents. For the quantitative methods; the study population comprised of men and women in their reproductive age from the source population. So that the total sample size for the three Senatorial districts in the state was 1,185. The instruments and methods of data collection adopted by the survey included well-structured questionnaire, and Checklists, especially for Direct Observation on the medical personnel and facilities. An intensive field work was conducted throughout the state.

All quantitative data collected from the field were collated and analyzed using Statistic Package for the Social Sciences (SPSS Version 25.0). Prior to data entry, all filled copies of questionnaire were checked in the field to remove inconsistencies or improper administration of instrument. The quantitative data was analyzed using primary descriptive and inferential statistics. For the first objectives which focused on the level of couples' awareness on family planning services, was achieved with the use of mean score using five Likert scale to measure their level of awareness. The second objective on the factors influencing the access and utilization of family planning services, the sigma method

was used to calculate the access and utilization score. In this model, percentage of couples who utilized the family planning services was obtained and a value known as sigma distance which is read from the statistical table of normal deviates is secured. The model is computed as follows:

$$100 - \frac{\text{Percentage of couples who utilized}}{2}$$

In addition, location of health facilities providing family planning services was achieved by uploading the marked GPS coordinates of health facilities into a GIS environment to generate a point map for their locations and as well determine if the health facilities are evenly distributed and accessible. And lastly, the use of bivariate logistic regression analysis was used to

$$\log \left( \frac{P_i}{1 - P_i} \right) = \sum B_i x_{ij} + E_i$$

Where  $P_i = \text{prob}(y=1)$  is the conditional probability that a couple utilize family planning services.

$1 - P_i = \text{prob}(y=0)$  is the conditional probability that a couple does not utilize family planning services

$\beta_i$  are parameters to be estimated

$X_{ij}$ s are the set of explanatory variables

$E_i$  is the error term.

In essence, the logistic regression of utilization of family planning services is thus specified as a function of these socio-cultural and economic variables as:

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_7x_7 + e$$

$Y$  is the log of use of family planning services for the couple (dummy variable of utilization of family planning services scores one and non-utilization scores zero).

$P$  = Probability of utilization of family planning services

$b_0$  = Constant

$b_1 - b_7$  = logistic regression coefficients

$x_1$  = Age in years

$x_2$  = Sex (Male <sup>(1)</sup>, Female <sup>(2)</sup>)

$x_3$  = Household size (number living and feeding together)

$x_4$  = Religion

$x_5$  = Number of times a couple had contact with family planning experts

$x_6$  = Income

$x_7$  = Education (Years)

$x_8$  = Occupation

## 3. Results and Discussion

Out of the 1,185 copies of questionnaire administered, only 966 were properly filled and retrieved for analysis. For this study, an impressionable response rate at about (92.5%) was recorded, which indicates that a good number across the study locations participated.

### 3.1. Socio-demographic Characteristics

Socio-demographic characteristics of Respondents

Of the three Senatorial districts studied, majority of the participants (44.8%) were of Yoruba descent (Kogi –West),

followed by (40.5%) as the Igalas (Kogi-East), (14.0%) as Bassa (Kogi-East) and (0.7%) as Ebiras (Kogi-Central). Although, Kogi-East had the highest sample size (518), the Yoruba speaking participants comprised the majority of the study.

The female participants made up the larger part of the study with about (58.9%), with the majority (69.9%) from Kogi-West and followed by (63.1%) from Kogi-Central. Aside this, the male participants consisted of a considerable number (41.1%) and well spread across the Senatorial districts. This high percentage of both sexes in the study is a good indication, since family planning practice requires the involvement of both, its level of adoption is likely to be high. This implies that, results indicated in the study is a reflection of both sex, therefore a wider outlook on the subject matter was given.

Also, most of the participants (33.1%) fall within the ages of 31-40 years, closely followed by those within the ages of 20-30 (25.6%), with few (13.5%) comprising of those within 50 years and above. This indicates that, over half (58.7%) of the participants were within their active reproductive age, thus the target group most suitable for the study, as they are ones that family planning services is meant for.

Furthermore, results indicated (74.1%) of the participants to be married, with about (12.9%) single, (6.1%) divorced and (5.0%) separated. The representation of the various statuses by this current study indicates that the findings will reveal trends in the adoption of the measure, thus revealing the level of adoption serving in the state.

Level of education among the studied participants were found to be high, with about (47.4%) indicated tertiary level and about (33.2%) stated finishing secondary education with only (6.1%) indicating no formal education. This is quite impressive, and this qualification is expected to play a major role in the awareness of the benefits of family planning in the state.

Furthermore, results also show that all participants were engaged in one occupation or the other, with the majority as traders (36.6%), farmers (31.1%), civil servants (13.7%) and artisans (7.2%). This indicates that all studied participants had means of livelihood, therefore could afford to seek for better health care services.

Although, almost all of the participants indicated having an occupation, however, most (40.4%) earn below the

minimum wage (N30, 000.00). While the rest (59.6%) may be earning, it implies that, since family income may not be able to support a large family size, the poor acceptance and practices of family planning services will not only bring poverty, but also all its associated social vices to the household and the society at all.

The common religious practices in the study area are Christianity (61.5%), Islam (31.9%) and about (5.4%) and (1.2%) indicated traditional and other religions respectively. It has been posited that, one's religion affiliation plays a major role in the decision and practice of health behaviour, therefore, the results of the study could be influenced by this factor.

The family setting common among the participants is monogamy (65.4%), while about (31.2%) indicated practicing polygamy, however the other (3.4%) stated other family settings outside the conventional. The trends associated in these settings greatly affects the adoption of the method, especially if emphasis on child bearing is the crux.

Interestingly, results show that, majority (51.3%) in the study had a family size of 4-6, which is followed by about (29.9%) with 1-3. This is a good indication, as this average family size is an indication of awareness on the importance of regulating the number of children with regards to their level of income as indicated by the study. Although, quite a significant number (18.7%) indicated having a large family size of about 7 and above, this implies that practices of this method is not well entrenched in some parts of the state especially in Kogi-West and Kogi-East which shows the highest among this category. Level of education, culture and belief systems amongst others could serve as reasons behind this result, therefore, the need to increase advocacy in these parts of the state cannot be over emphasized.

A further indication on the current family size found in this study is the responses of the participants to the question on the number of children they desire to have. A good number of them (52.0%) reported wanting about 3-4, while about (33.5%) stated they wished to have 5 and above. Given the level of income reported and the level of education by the various participants, the indication to the number of children desired shows a level of indifference to the challenges this may pose; consequently, implying a poor knowledge and practice of family planning method in the state.

**Table 2.** Socio-demographic characteristics of respondents in the three Senatorial districts, Kogi State, North Central Nigeria.

Variables	Category	Kogi East	Kogi-West	Kogi-Central	Total
Ethnicity	Igala	371 (71.6%)	0 (0.0%)	20 (19.4%)	391 (40.5%)
	Ebira	5 (1.0%)	2 (0.6%)	0 (0.0%)	7 (0.7%)
	Bassa	134 (25.9%)	1 (0.3%)	0 (0.0%)	135 (14.0%)
	Yoruba	8 (1.5%)	342 (99.1%)	83 (80.6%)	433 (44.8%)
Gender	Male	255 (49.2%)	104 (30.1%)	38 (36.9%)	397 (41.1%)
	Female	263 (50.8%)	241 (69.9%)	65 (63.1%)	569 (58.9%)
Age	20-30	89 (17.2%)	121 (35.1%)	37 (35.9%)	247 (25.6%)
	31-40	183 (35.3%)	107 (31.0%)	30 (29.1%)	320 (33.1%)
	41-50	179 (34.6%)	69 (20.0%)	21 (20.4%)	269 (27.8%)
	50 and above	67 (12.9%)	48 (13.9%)	15 (14.6%)	130 (13.5%)

Variables	Category	Kogi East	Kogi-West	Kogi-Central	Total
Marital status	Single	64 (12.4%)	51 (14.8%)	10 (9.7%)	125 (12.9%)
	Married	385 (74.3%)	244 (70.7%)	87 (84.5%)	716 (74.1%)
	Divorced	48 (9.3%)	10 (2.9%)	1 (1.0%)	59 (6.1%)
	Separated	16 (3.1%)	30 (8.7%)	2 (1.9%)	48 (5.0%)
	Widowed	5 (1.0%)	10 (2.9%)	3 (2.9%)	18 (1.9%)
Level of educational	No formal education	45 (8.7%)	11 (3.2%)	3 (2.9%)	59 (6.1%)
	Primary education	52 (10.0%)	58 (16.8%)	18 (17.5%)	128 (13.3%)
	Secondary Education	177 (34.2%)	108 (31.3%)	36 (35.0%)	321 (33.2%)
	Tertiary Education	244 (47.1%)	168 (48.7%)	46 (44.7%)	458 (47.4%)
Occupation	Civil service	89 (17.2%)	34 (9.9%)	9 (8.7%)	132 (13.7%)
	Trading	200 (38.6%)	124 (5.9%)	30 (29.1%)	354 (36.6%)
	Farming	150 (29.0%)	117 (3.9%)	33 (32.0%)	300 (31.1%)
	Artisan	39 (7.5%)	20 (5.8%)	11 (10.7%)	70 (7.2%)
Level of income	< N20,000	171 (33.0%)	159 (46.1%)	60 (58.3%)	390 (40.4%)
	21,000-40,000	155 (29.9%)	105 (30.4%)	23 (22.3%)	283 (29.3%)
	41,000-60,000	74 (14.3%)	39 (11.3%)	7 (6.8%)	120 (12.4%)
	61,000-80,000	47 (9.1%)	19 (5.5%)	7 (6.8%)	73 (7.6%)
	81,000-100,000	59 (11.4%)	16 (4.6%)	3 (2.9%)	78 (8.1%)
	>100,000	12 (2.3%)	7 (2.0%)	3 (2.9%)	22 (2.3%)
Religion	Christianity	236 (45.6%)	276 (80.0%)	82 (79.6%)	594 (61.5%)
	Islam	245 (47.3%)	47 (13.6%)	16 (15.5%)	308 (31.9%)
	Traditional	31 (6.0%)	17 (4.9%)	4 (3.9%)	52 (5.4%)
	Others (specify)	6 (1.2%)	5 (1.4%)	1 (1.0%)	12 (1.2%)
	Monogamy	322 (62.2%)	231 (67.0%)	79 (76.7%)	632 (65.4%)
Family setting	Polygamy	174 (33.6%)	105 (30.4%)	22 (21.4%)	301 (31.2%)
	Others (Specify)	22 (4.2%)	9 (2.6%)	2 (1.9%)	33 (3.4%)
Household size	1-3	164 (31.7%)	96 (27.8%)	29 (28.2%)	289 (29.9%)
	4-6	267 (51.5%)	173 (50.1%)	56 (54.4%)	496 (51.3%)
	7-10	57 (11.0%)	51 (14.8%)	12 (11.7%)	120 (12.4%)
	11-above	30 (5.8%)	25 (7.2%)	6 (5.8%)	61 (6.3%)
	2	68 (13.1%)	48 (13.9%)	23 (22.3%)	139 (14.4%)
Desired number of children	3	113 (21.8%)	88 (25.5%)	22 (21.4%)	223 (23.1%)
	3-4	153 (29.5%)	100 (29.0%)	27 (26.2%)	280 (29.0%)
	5	114 (22.0%)	55 (15.9%)	12 (11.7%)	181 (18.7%)
	6 and above	70 (13.5%)	54 (15.7%)	19 (18.4%)	143 (14.8%)

Source: Author's Field Survey, 2019.

### 3.2. Knowledge on Family Planning

The knowledge on family planning is quite high in the State with about (93.0%) responding in the affirmative. This level of awareness cuts across the three Senatorial districts in the State, with Kogi-East, West and Central indicating 91.3%, 94.5% and 93.0% respectively. The reason behind this could be as a result of their level of education as found in the study or advocacy through social media or the attendance of ante-natal by the female participants.

The channel of the information on family planning in the state as indicated by result of the study is mostly through health personnel (60.9%). This indicates that proper and accurate information is being passed across in the state. Other than the health personnel, information on this method is being accessed through friends and relations (22.9%). Although, this is an indication that the knowledge of this service has been incorporated into households and the family system, however, the choice of words and misinformation that may take place especially if the informant is not familiar with this procedure could be damaging and can serve as a

major drawback.

When asked on the specific knowledge of family planning, results indicated majority (62.1%), stated that the procedure gives couples time to plan the number and spacing of their children. This response by the majority indicates that about 6 out of every 10 persons in Kogi state can rightly link the importance of this practice to the family welfare. However, about (10.7%) do not believe in the benefit of the measure, as there are misconceptions held by this number as indicated by this study. These misconceptions may be informed due to lack of education or their first source of information.

For the adoption/practice of any health promotion measure to work, the health behaviour of the target population is a great determiner. The understanding of the perception towards the proposed measure helps in the assessment of the extent of success to be derived. About (85.0%) perceive that family planning prevents women from being pregnant with the majority (91.3%) in Kogi-Central. This implies that, people in Kogi state have a positive attitude to the efficacy of

the measure. To test the level of people believe in the effectiveness of the method, a high number (51.6%) agreed that it is very effective. However, about (20.5%) do not believe in its efficacy, while about (27.7%) have no idea. The implication is that, almost half of the studied participants do

not really believe in the measure even though about (85.0%) had earlier mentioned the effectiveness of the procedure in preventing pregnancy. This may serve as a reason for the low level of adoption recorded in the study.

**Table 3.** Knowledge on Family Planning services among respondents in Kogi State.

Variable	Category	Kogi East	Kogi-West	Kogi-Central	Total
Level of awareness	Yes	473 (91.3%)	326 (94.5%)	99 (96.1%)	898 (93.0%)
	No	45 (8.7%)	19 (5.5%)	4 (3.9%)	68 (7.0%)
First source of awareness	Friends/Relative	125 (26.4%)	67 (20.6%)	14 (14.1%)	206 (22.9%)
	Health Personnel	246 (52.0%)	225 (69.0%)	76 (76.8%)	547 (60.9%)
	Print Media (Newspaper/Handbill)	64 (13.5%)	12 (3.7%)	2 (2.0%)	78 (8.7%)
	Electronic media (Radio/Television)	27 (5.7%)	14 (4.3%)	3 (3.0%)	44 (4.9%)
	Others	11 (2.3%)	8 (2.5%)	4 (4.0%)	23 (2.6%)
Specific knowledge on family planning	Family planning gives couples opportunity to plan the number and spacing of their children	335 (66.3%)	192 (56.3%)	60 (60.0%)	587 (62.1%)
	Family planning is a strategy designed by the white man to give power to women	19 (3.8%)	9 (2.6%)	2 (2.0%)	30 (3.2%)
	Family planning is preventing pregnancy	28 (5.5%)	33 (9.7%)	10 (10.0%)	71 (7.5%)
	Family planning is avoiding unwanted pregnancy	68 (13.5%)	60 (17.6%)	20 (20.0%)	148 (15.6%)
usage of family planning	Family planning is having the number of children that one can afford to cater for	55 (10.9%)	47 (13.8%)	8 (8.0%)	110 (11.6%)
	Yes	432 (83.4)	295 (85.5)	94 (91.3)	821 (85.0)
	No	49 (9.5)	28 (8.1)	4 (3.9)	81 (8.4)
level of effectiveness	Don't know	37 (7.1)	22 (6.4)	5 (4.9)	64 (6.6)
	Very effective	211 (48.8)	159 (53.9)	54 (57.4)	424 (51.6)
methods	Not so effective	85 (19.7)	65 (22.0)	18 (19.1)	168 (20.5)
	Don't know	136 (31.5)	71 (24.1)	22 (23.4)	229 (27.9)

Source: Authors' Field Survey, 2019.

### 3.3 Known Benefits of Family Planning Services

The knowledge on the benefit of family planning is high in the state. About (84.8%) strongly agreed that it prevents a large family size. However, those who disagreed to the accrued benefits (9.4%) coupled with those who are indecisive (5.8%) make up the percentage in the state that may not be fully aware of the need for this procedure; the need to continuously create awareness and expand on the platforms for such enlightenment cannot be over emphasized.

Those who reported that family planning practices helps the mother to regain her strength before the next baby were about (79.8%), while about (74.9%) stated it protects the mother's health. Furthermore, others reported that, the measure helps couples to prepare for their children either financially and mentally (85.5%), with (81.5%) stating it helps create a better society, while (74.5%) stated that it helps

a couple to become responsible parents. In addition, most of the participants (76.9%) attributed the well-being of the child and the promise of a happy home (81.0%) to the strategy.

A good number (58.6%) of the participants indicated the importance of the measure to improving the standard of living and about (74.7%) stated that it enables better approbation for the children. Others cited benefits such as, the enablement of child education (95.1%), reduction in child birth complications (62.9%), proper child spacing (87.5%), controlling the number of children (80.9%) and reduction in maternal and infant mortality rates (60.1%). These responses are very promising, as they serve as good indications to the practice of the measure in the state. However, those who didn't not affirm to these mentioned benefits in the study, although few, affects the overall level of adoption of the measure in the state.

**Table 4.** Known Benefits of Family Planning Services among studied participants in Kogi State.

Variables	SA	A	D	SD	U	Total n (%)
	n (%)	n (%)	n (%)	n (%)	n (%)	
It prevents a large family size from strains couple's relationship	502 (52)	317 (32.8)	78 (8.1)	13 (1.3)	56 (5.8)	966 (100)
It helps the mother to regain her strength before the next baby	450 (46.6)	321 (33.2)	121 (12.5)	11 (1.1)	63 (6.5)	966 (100)
it protects the health of the mother	418 (43.3)	305 (31.6)	143 (14.8)	21 (2.2)	79 (8.2)	966 (100)
Helps couples to prepare for their children	384 (39.8)	441 (45.7)	76 (7.9)	15 (1.6)	50 (5.2)	966 (100)
it helps to create a better society	417 (43.2)	370 (38.3)	108 (11.2)	20 (2.1)	51 (5.3)	966 (100)
family planning helps a couple become responsible parents	394 (40.8)	326 (33.7)	153 (15.8)	44 (4.6)	49 (5.1)	966 (100)
it helps protect the health of children	388 (35.0)	405 (41.9)	144 (14.9)	30 (3.1)	49 (5.1)	966 (100)
It lead to a happy home	386 (40.0)	396 (41.0)	114 (11.8)	17 (1.8)	53 (5.5)	966 (100)
it improves standard of living	448 (46.4)	333 (34.5)	118 (12.2)	17 (1.8)	50 (5.2)	966 (100)
it allows better approbation for children	352 (36.4)	403 (41.7)	153 (15.8)	24 (2.5)	61 (6.3)	966 (100)

Variables	SA	A	D	SD	U	Total n (%)
	n (%)					
It enables proper child education	455 (57.1)	367 (38.0)	73 (7.6)	19 (2.0)	52 (9.4)	966 (100)
It helps avoid complications at child birth	292 (30.2)	316 (32.7)	187 (19.4)	112 (11.6)	59 (6.1)	966 (100)
it enables proper child spacing	525 (54.3)	321 (33.2)	58 (6.0)	9 (0.9)	53 (5.5)	966 (100)
Family planning helps to control the number of children	461 (47.7)	321 (33.2)	29 (3.0)	10 (1.0)	145 (15.0)	966 (100)
It helps to reduce both maternal and infant mortality	307 (31.8)	273 (28.3)	132 (13.7)	95 (9.8)	159 (16.5)	966 (100)

Source: Authors' Field Survey, 2019.

### 3.4. Access and Practice of Family Planning Services

The level of access to family planning services as shown in this study is quite high (74.2%), with Kogi-West having the highest number (81.4%), followed by Kogi-Central (79.6%) and Kogi-East (68.3%). This means, the unit in charge of dispensing these services across the healthcare centres in the state are well equipped in terms of personnel and the supply of necessary materials to accommodate this need.

However, of the 717 (100%) who stated having access to the services, only 435 (45.0%) make use of them, with those practicing most from Kogi-West (52.8%), followed by Kogi-Central (50.5%). Several factors may serve to influence the level of practice recorded by the study, such as lack of spousal support, cultural beliefs, and poor access, among others. Therefore, this low level of the practice of this procedure is not encouraging, therefore the need for urgent attention.

At the time of this current study, the adoption of this measure is at about (54.3%), with similar percentage across the three Senatorial districts in the state. Although this level is low, it's a fair indication that half of the studied

participants adopted this procedure, which shows that awareness of the benefits as well as access is quite good.

The method of the family planning procedure commonly practiced in the state is Oral Contraceptive (30.8%) followed by Billings ovulation method (21.9%). Others include diaphragm, withdrawal method, periodic abstinence, cervical cap and intrauterine device (8.7%, 18.1%; 13.7% 1.5% and 5.3%) respectively.

The reasons cited for the preferred choice in the study varies, however, majority (30.0%) stated lack of side effects, (27.5%) availability and (20.2%) suitability and reliability among reasons for adoption. The reported ease in the practice of the measure may be responsible for the level of adoption in the study.

The time frame in the use of the preferred strategy varies among participants; results showed about (42.7%) reported using it between 1-5 years, while (27.8%) mentioned less than a year. Those who have been using it for longer period of time comprise of (29.6%), and this may point to the fact that, the convenience and effectiveness of the measure aids in the continuous adoption by the participants in the study area.

**Table 5.** Access and Practice of family planning services among study participants in Kogi State.

Variables		Kogi East	Kogi-West	Kogi-Central	Total
Access to family planning services	Yes	345 (68.3%)	281 (81.4%)	82 (79.6%)	717 (74.2%)
	No	164 (31.7%)	64 (18.6%)	21 (20.4%)	249 (25.8%)
Utilization of family planning services	Yes	201 (38.8%)	182 (52.8%)	52 (50.5%)	435 (45.0%)
	No	317 (61.2%)	163 (47.2%)	51 (49.5%)	531 (55.0%)
Current status on the use of family planning methods	Yes	278 (53.7%)	198 (57.4%)	49 (47.6%)	525 (54.3%)
	No	240 (46.3%)	147 (42.6%)	54 (52.4%)	441 (45.7%)
Preferred methods	Billings ovulation method	53 (19.0%)	51 (25.8%)	11 (22.4%)	115 (21.9%)
	Oral contraceptives	98 (35.1%)	52 (26.3%)	12 (24.5%)	162 (30.8%)
	Diaphragm	22 (7.9%)	22 (11.1%)	2 (4.1%)	46 (8.7%)
	Withdrawal Method	48 (17.2%)	35 (17.7%)	12 (24.5%)	95 (18.1%)
	Periodic abstinence	35 (12.5%)	28 (14.1%)	9 (18.4%)	72 (13.7%)
	Cervical cap	5 (1.8%)	3 (1.5%)	0 (0.0%)	8 (1.5%)
	Intrauterine device	18 (6.5%)	7 (3.5%)	3 (6.1%)	28 (5.3%)
	Its affordable	116 (35.0%)	48 (19.8%)	10 (16.7%)	174 (27.5%)
Reasons for the preferred methods	It is available	51 (15.4%)	25 (10.3%)	5 (8.3%)	81 (12.8%)
	It has little or no side effect	76 (23.0%)	85 (35.1%)	29 (48.3%)	190 (30.0%)
	Suitable, effective/reliable	69 (20.8%)	51 (21.1%)	8 (13.3%)	128 (20.2%)
	No reason	10 (3.0%)	13 (5.4%)	2 (3.3%)	25 (3.9%)
	Partner involvement	8 (2.4%)	15 (6.2%)	4 (6.7%)	27 (4.3%)
	Others (specify)	1 (0.3%)	5 (2.1%)	2 (3.3%)	8 (1.3%)
	Less than 1 year	119 (35.3%)	50 (20.7%)	9 (14.5%)	178 (27.8%)
Duration in the practice of family planning	1-5 years	158 (46.9%)	94 (39.0%)	21 (33.9%)	273 (42.7%)
	6-10 years	36 (10.7%)	51 (21.2%)	14 (22.6%)	101 (15.8%)
	11-15 years	11 (3.3%)	21 (8.7%)	8 (12.9%)	40 (6.3%)
	16-20 years	9 (2.7%)	14 (5.8%)	8 (12.9%)	31 (4.8%)
	21 and above	4 (1.2%)	11 (4.6%)	2 (3.2%)	17 (2.7%)

Source: Authors' Field Survey, 2019.

**3.5. Factors Affecting the Practice of Family Planning Methods**

Beside the above aforementioned factors, a major factor likely to affect the practice of this procedure is distance from family planning centres. The study shows that, about (61.1%) stated being close to the centre, which implies that access to services being provided by the various centres are within reach. This serves as a parameter to the level of practice of the measure.

In addition, the convenience and ease in the use of these services go a long way in increasing the level of the practice among the people. As shown by this study, most (50.9%) of the participants reported to spend less than an hour in

accessing these services. This implies that, many, that is, about half of the participants irrespective of their schedule can access this measure, and by this encourages an increase in the practice.

The factors affecting the practice of the measure in the state is believed to be associated with age (28.2%), lack of education (25.9%), while others include cost (19.2), culture (17.9%) disapproval from friends (0.9%) and attitudes of health workers (7.9%). These serve as factors influencing the level of practice of this measure in the state, therefore for people to be encouraged, efforts geared towards addressing these among others should be prioritized.

*Table 6. Challenges in the practice of family planning methods.*

Variables	Category	Kogi East	Kogi-West	Kogi-Central	Total
		n (%)	n (%)	n (%)	n (%)
Proximity to family planning centre	Very close	97 (20.5)	70 (21.9)	20 (20.2)	187 (20.9)
	Close	164 (34.6)	99 (30.9)	24 (24.2)	287 (32.1)
	Far	62 (13.1)	77 (24.1)	14 (14.1)	153 (17.1)
	Very far	52 (11.0)	35 (10.9)	15 (15.2)	102 (11.4)
	I don't know	99 (20.9)	39 (12.2)	26 (26.3)	164 (18.4)
Waiting hours at family planning centres	Less than 1 hour	153 (44.7)	128 (54.7)	45 (70.3)	326 (50.9)
	1-2 hours	156 (45.6)	79 (33.8)	15 (23.4)	250 (39.1)
	3-4 hours	28 (8.2)	24 (10.3)	4 (6.3)	56 (8.8)
	5 hours and above	5 (1.5)	3 (1.3)	0 (0.0)	8 (1.3)
Challenges to the practice of family planning methods	Age	111 (22.9)	108 (35.8)	27 (31.4)	246 (28.2)
	Cost	96 (19.8)	47 (15.6)	25 (29.1)	168 (19.2)
	Culture	101 (20.8)	46 (15.2)	9 (10.5)	156 (17.9)
	Disapproval from friends	3 (0.6)	4 (1.3)	1 (1.2)	8 (0.9)
	Attitude of health workers	41 (8.5)	19 (6.3)	9 (10.5)	69 (7.9)
	Lack of education	133 (27.4)	78 (25.8)	15 (17.4)	226 (25.9)

Source: Authors' Field Survey, 2019.

**3.6. Test of Hypotheses**

Hypothesis One

Ho: There is no significant Relationship between couples' awareness of family planning services and utilization.

H1: There is significant relationship between couples' awareness of family planning services and utilization.

*Table 7. Utilization of family planning by awareness.*

Heard of family planning	Utilization of FP		
	Yes	No	Total
Yes	448 (97.2%)	450 (89.1%)	898 (93.0%)
No	13 (2.8%)	55 (10.9%)	68 (7.0%)
Total	461 (100.0%)	505 (100.0%)	966 (100.0%)

Chi-Square Tests ( $X^2=23.991$ ;  $df=1$ ;  $p=0.000$  (Sig.)).

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.991 <sup>a</sup>	1	.000
Likelihood Ratio	25.910	1	.000
Linear-by-Linear Association	23.966	1	.000
N of Valid Cases	966		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 32.45.

Therefore, the  $p=0.000$  indicates a significant relationship between couples' level of awareness of family planning services and its uptake, thus the alternative hypothesis is

accepted (table 7).

Hypothesis Two

Ho: There is no significant relationship between type of

family planning methods and utilization of services among couples.

family planning methods and utilization of services among couples.

H1: There is significant relationship between type of

**Table 8.** Utilization of family planning by FP methods.

FP facilities	Utilization of FP		
	Yes	No	Total
Billings ovulation method	63 (16.1%)	119 (37.3%)	182 (25.6%)
Oral contraceptives	132 (33.7%)	89 (27.9%)	221 (31.1%)
Diaphragm	36 (9.2%)	43 (13.5%)	79 (11.1%)
Withdrawal Method	70 (17.9%)	42 (13.2%)	112 (15.8%)
Periodic Abstinence	60 (15.3%)	17 (5.3%)	77 (10.8%)
Cervical cap	5 (1.3%)	3 (0.9%)	8 (1.1%)
Intrauterine device	26 (6.6%)	6 (1.9%)	32 (4.5%)
Total	392 (100.0%)	319 (100.0%)	711 (100.0%)

Chi-Square Tests ( $X^2=63.404$ ;  $df=6$ ;  $p=0.000$  (Sig.).

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	63.404 <sup>a</sup>	6	.000
Likelihood Ratio	65.552	6	.000
Linear-by-Linear Association	43.179	1	.000
N of Valid Cases	711		

a. 2 cells (14.3%) have expected count less than 5. The minimum expected count is 3.59.

Therefore, the  $p=0.000$  as indicated in table 8 shows a positive and significant relationship between the type of family planning and its utilization, the alternative hypothesis is accepted.

Hypothesis Three

Ho: There is no significant relationship between benefits

of men involvement in family planning and the utilization of the services.

H1: There is a significant relationship between benefits of men involvement in family planning and the utilization of the services.

**Table 9.** Benefits of men involvement on family planning (Regression Analysis).

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.168	.084		13.910	.000
All the family members will enjoy improved health	.180	.029	.270	6.120	.000
Women will experienced fewer unplanned pregnancy	.062	.028	.091	2.189	.029
Children will have chance to attend school	.089	.021	.180	4.229	.000
It enhances both socio-economic status and improves well-being of the family members	.063	.031	.080	2.037	.042

a. Dependent Variable: Do you utilize family planning services?

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.337 <sup>a</sup>	.114	.095	.476

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20.658	15	1.377	6.091	.000 <sup>b</sup>
	Residual	160.991	712	.226		
	Total	181.648	727			

a. Dependent Variable: Do you utilize family planning services?

The  $R^2$  of 0.114 shows that the variables on the benefits of men involvement on family planning as mentioned below contributed only about 11.4% to variability in the uptake of the services. This implies that other factors other than the men involvement in family planning are more beneficial.

A positive relation was observed between different variables on benefits of men involvement in the utilization of

family planning services (all the family members will enjoy improved health, women will experience fewer unplanned pregnancy, children will have chance to attend school and it enhances both the socio-economic status and improved well-being of the family members) as shown in table 9. It was found that benefit of improved health by family members and the benefit of children attending school played the most

significant role ( $\beta=0.270$ ,  $t=6.120$ ,  $p\text{-value}=<0.005$ ) and ( $\beta=0.180$ ,  $t=4.229$ ,  $p\text{-value}=<0.005$ ) respectively.

#### 4. Discussion of Findings

The prevention of undesired pregnancy through practice of family planning comes with numerous benefits. The empowering of women, improving family welfare and supporting the health and development of communities, as well as birth rate/population control as indicated by the (59.4%) in this study are accrued to modern family planning methods. However, the unmet needs as well as other entrenched socio-cultural factors impede the practice. The current study found that a good number 531 (55.0%) do not utilize any family planning methods, even though about 898 (93.0%) indicated being aware of the services and about (74.2%) had access to the services across the various locations of the state.

The high level of awareness of family planning services recorded by the current study corroborates with one in Abakaliki, Nigeria (90.9%), in Nakaseke District, Uganda (98%), in Ogbomosho, Nigeria (97.5%), and Rivers, Nigeria (99.5%) [12-15]. The similarities on the high awareness recorded by the study and others could be as a result of respondents' level of education, advocacy through media and other social organizations as well as supportive family and community systems. Contrarily, other reports recorded a lower level, (86.0%) in Ethiopia and (73.3%) in Turkey [16, 17]. These differences could be as a result of low level of education, small study sample size, among others.

Notably, the current study found a positive association between couples' level of awareness and their uptake of family services (Chi-Square Tests ( $X^2$ )=23.991;  $df=1$ ;  $p=0.000$  (Sig.)), however this result did not translate to uptake of the services. Several factors including unfriendly attitude of health workers, age, cost, culture as well as lack of education may serve as impediments as given by this study. Notable, the current study found that perceived inefficacy of family planning methods to prevent pregnancy greatly affects its uptake. This was indicated by about (20.5%) who reported on the inefficacy of the methods and (27.9%) that is undecided on the efficacy of the services of family planning. This report may be due to the fact that, participants' practice of the preferred choice may have not be correct and consistent in line with the recommendation by the World Health Organization and other related agencies, thus did not provide the level of protection expected.

The studies revealed that, the desire for more children and husband's disapproval serve as great influence in the low uptake of family planning services [18, 19]. This means that, irrespective of the known risks of pregnancy related issues especially among older women, their desire for more children overrides these risks. Even though evidence has shown that women who have had more than four pregnancies were at an increased risk of maternal mortality [1]. The role in which the socio-cultural factors such as the preference for more children, especially male children by families and

communities for several reasons but importantly for the purpose of labour affects the adoption of the services.

Furthermore, the low contraceptive prevalence by this study could have been influenced by the level of inaccessibility to preferred methods as indicated by about (25.8%). This could be responsible for about (45.7%) who are not currently using any of the services by this study. The current study found an association on the uptake of family planning services by availability of preferred methods (Chi-Square Tests ( $X^2$ )=63.404;  $df=6$ ;  $p=0.000$  (Sig.)). It was shown that, the use of oral contraceptive is widely adopted while cervical cap was less practiced. This imply that, the type of method found suitable for reasons mentioned including less cost, access, ease in the use, less side-effects and so on affects the uptake of the services. Results indicate that majority (33.7%), reported preference for Oral contraceptives, whereas about (25.8%) had no access to contraceptives and about (49.0%) reported non-use due to side-effects. This implies that, stock out of the preferred choice of contraceptive and perceived side-effects may be responsible for those (49.0%) with reported non-usage. Meanwhile, some studies, have reported on the association between the fears of side-effect with the low uptake of contraceptive [12, 13]. Although most times, these side-effects on some of the contraceptives are in fact real, but the perceived fear affecting the use are greatly influenced by misconceptions and misinformation [20].

Conversely, preference for a particular method where such is not available serves as deterrent to the uptake of family planning services. A study reported that majority of the study participants indicated using short-term contraceptive methods such as injectable [16]. According to the study, reasons that influence this choice include simplicity in use, easy to discontinue when ready to be pregnant and inability to be detected by one's spouse who is not in support of family planning services among others. In this current study, the reasons for the preference of the short-term method include, affordability, availability, less side-effects, reliability among others. This implies that, the use of the short-term methods fits more suitable to the target population especially in the developing country including Nigeria as shown among the (27.8%) and (42.7%) participants of the current study who indicated uptake less than a year and between one to five years respectively.

Many existing reasons may stand to inform on this choice including factors such as cost, religion and cultural constraints as well as lack of spousal support as barriers to adopting the services. Consequently, the impact of this low uptake of family planning services among the study participants as indicated by this study may have informed on the (30.5%) who had considered abortion due to unwanted pregnancy. Although, this number may be low but the psychological trauma, and the financial and social implications among this group and their family can be very huge.

Several studies have reported on the role of men's involvement in the uptake of family planning services [21-

23]. Findings of this current study revealed a significant relationship between men's involvement in family planning and the practice among the study participants (Improved family health  $\beta=0.270$ ,  $t=6.120$ ,  $p\text{-value}=\leq 0.000$ ; attendance of school by children  $\beta=0.180$ ,  $t=4.229$ ,  $p\text{-value}=\leq 0.000$ ; experience of fewer pregnancy  $\beta=0.091$ ,  $t=2.189$ ,  $p\text{-value}=\leq 0.029$ ; improved socio-economics status and well-being  $\beta=0.080$ ,  $t=2.037$ ,  $p\text{-value}=\leq 0.042$ ). It was revealed that, among the (20.5%) that does not utilize the family planning services, was a result of husband's disapproval. However, about (4.3%) level of adoption of a particular method was mainly because of the husband's preference. This was supported by a study where it was revealed that male partner positive attitude towards contraceptive, increases its use [21]. Meanwhile, other previous studies have shown that male partner disapproval of contraception, women's fear of husband's reactions, and couples' power dynamics determine the uptake of the services [12, 24].

Also, it was reported that, women who communicates and have their spouse approval are 9.6 times likely to utilize family planning services [23]. The result of the current study support this as about (72.0%) of the participants cited the involvement of husband and wife in the decision making on reproductive health and family welfare helps in the adoption of family planning services. Generally, women's perception of their spouse approval goes a long way in the uptake of the services. However, a report on women who do not utilize family planning services shows about (73.6%) who do out of their own personal opposition and without male partner disapproval [25]. The implication is that, notwithstanding the important role male partner plays in the uptake of family planning services, cumulative of several other factors as indicated by this study and others all serve to influence about 214 million women in the developing countries who are not using modern contraceptive method [1].

## 5. Strength and Limitation

The data collected by this study cuts across the three Senatorial districts of Kogi state, and with the inclusion of the headquarters in each zones, generalization of the findings is enabled. In addition, the study participants cut across both sexes thereby bringing to focus issues affecting these groups. Importantly, the adoption of the use of both qualitative and quantitative methods of data collections ensure the triangulations of methods, implying that shortcomings in one was complimented by the others, thus the findings of the study more reliable. Therefore, the adoption of the data from this study for policy and other intervention programmes will address the problem appropriately.

However, the study faced some limitations in the aspect of its sample size. Although, the selection was done using the household head population adapted from the Nigerian Demographic Health Survey (NPC/ICF, 2013), that may not be the actual population of each of the selected areas as at the time of this survey. Also, the retrieved copies of questionnaire for the final analysis were short of over a

hundred and fifty. Considering that the sample size may have not been sufficient for the entire state, this further pose as another factor affecting the generalization of findings. Given this hindrances, this study provides valuable contribution to the body of existing knowledge on the factors affecting the accessibility and uptake of family planning services in Kogi State and Nigeria in general.

## 6. Conclusion

This study found a good level of awareness and access to family planning services in Kogi State, although this was not in accordance with the level of uptake found among the study participants. Several factors were identified to act as impediments, including perceived or experienced of side-effects, poor access, attitudes of health workers, cost, and age among others. Importantly, the need to address the misconceptions about the side-effects of contraceptive use and the training of health personnel on proper customer service (client-provider) delivery is germane. Also, the preferred choice of contraceptive was found to be mainly Injectable and Billing Ovulation method. These are short-term contraceptive use, of which were preferred by majority due to its ease of use and discontinuation when required, low cost, availability, and ability to be unnoticed by disproving husband, among others. Given the current level of uptake of family planning services in the state, it is important to note that, the choice of the short-term use, although easy to adopt, also makes for a too easy disruption, therefore may not be enough to address the some of the issues which family planning services stand for.

This study therefore, recommends an advocacy to maximize the use of preferred contraceptive among the people and also for an intervention by private, government and non-governmental agencies in reducing the unmet needs of contraceptive.

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