International Journal of Humanities and Social Sciences
p-ISSN: 1694-2620
e-ISSN: 1694-2639
Vol. 15, No. 1 (2023), pp. 42-58, ©IJHSS

Impacts of Socioeconomic Milieus, Enlightenment and Location on Utilization and Accessibility of Family Planning Services among Women in Lafia LGA, Nasarawa State

Lewis Olumuyiwa Abejide and Fatima Sidi Sani
Federal University of Lafia,
Take-Off Site Campus, Akunza, Lafia,
Nasarawa State, Nigeria

Abstract
The study examined the impacts of socioeconomic milieus, enlightenment and location of health centers on the accessibility and utilization of family planning services (FPSs) among women of reproductive age in Lafia Local Government Area (LGA) of Nasarawa State. Five out of 13 wards that constitute the LGA were randomly selected. Four primary healthcare centers (PHCs) were selected from each of the wards, totaling 20 PHCs. A one-time structured questionnaire form was randomly administered to 20 women between the ages of 15 and 49 years in each of the selected PHCs, totaling 400. Descriptive statistics and chi-square were used to analyze the data at $p \leq 0.05$. The findings showed that two-thirds (61.9%) of the selected women using any of the family planning (FP) methods were young adults (21-30 years). The majority of them (76.4%) were married, predominately (72.6%) Muslims, with half having tertiary education. One-third (33.7%) were engaged in business with over two-thirds (68.8%) earning less than the minimum wage, while the majority resided in the metropolis. Awareness and purpose were significant factors associated with FP utilization, whilecloseness of home, distance covered, time duration and means of transport to a health facility were significant factors associated with FP accessibility. It was recommended that enlightenment on the utilization of FP services should be extended to spouses in the study area, as well as establishing more healthcare centers for prompt accessibility and recruiting additional personnel in the rural areas.

Keywords: socioeconomic milieus; location, utilization; accessibility; family planning services; Lafia Local Government Area

1. Introduction

Family planning services (FPS) have been highlighted as one of the basic and most important strategies to avoid millions of unplanned pregnancies often associated with high-risk abortions. Accordingly, FPS have helped women worldwide in preventing and reducing high-risk pregnancies that often occurred among teenagers or older womenso as to improve both mother and child health (World Health Organization [WHO], 2006). The MDGs policy implementation reports in 2007 revealed that the adoption of family planning (FP) by women with HIV infection had significantly reduced the proportion of infants infected with HIV by 35-45 per cent. This is

because the Prevention of Mother to Child Transmission (PMTCT) program through contraceptives has reduced the incidence of such mothers having an unplanned pregnancy at a relatively low cost (United Nations, 2007). Johnson and Ekong (2015) noted that nearly 15 per cent of the pregnancies occurring each year in Nigeria are unplanned, and such pregnancies are mostly prevalent among women with low-income status. This means that many of the families with these unplanned pregnancies are overburdened with the needs of large families, while such scenarios could be prevented and controlled by appropriate utilization of FPS.

According to the National Population Commission (NPC) in the National Demographic and Health Survey (NDHS) report (2017), 17 per cent of married women age 15-49 out of 40 millionin the reproductive age use the methods of FPSs (NPC, 2019). In addition, there was a significant unmet need for utilization of FPS in Nigeria.The NPC report in the NDHS indicated that 19 per cent of married women have an unmet need for FPSs. In other words, 7 per cent of them were for limiting while 12 per cent were for spacing their families (NPC, 2019).Studies relating to population management such as those conducted by Johnson and Ekong (2015), Obinna (2017), and Muhammad (2018) as well as reports by the NPC (2017) have shown that standards of living plummet when the rate of population growth exceeds that of economic growth. For instance, at the household level, the high fertility rate of a woman usually contributes toward high consumption, thereby resulting ina high cost of living, which leads to poor health conditions, malnutrition and poor educational background. In view of this, more developed nations such as Japan, China and the United Kingdom (UK) have employed various strategies to manage their population for effective economic growth and avoiding perceived social problems.

In Nigeria, however, governments at all levels, in collaboration with other stakeholders involved in the provision of FPSs, have put in place various policies and programs to increase the uptake of FPSs. These policies and programs are aimed at increasing the contraceptive prevalence rate (CPR), the reduction ofthe total fertility rate (TFR) and the unmet need for family planning. However, despite the policies and programs of government and other stakeholders, the TFR in Nigeriastood at 5.2 per cent (World Bank, 2021).

In 2020, a study carried out by some DalhatuAraf Specialist Hospital (DASH) doctors in obstetrics and gynaecology in collaboration with doctors and nurses working in some primary health care (PHC) centers within Lafia LGA showed that there was relatively low utilization of FPSs by reproductive age women in the LGA (Oyeniranet al., 2020). Consequently, from a survey carried out by the researchers in the LGA, it was observed that a large number of women have too many children, more than what the family's economic capability could carter for. In view of this, the research problem for the study therefore focused on the level of ignorance, ineffectiveness, non-availability and utilization of FPSs among women in Lafia LGA. To solve the research problem mentioned above, this study was therefore aimed at investigating factors relating to the awareness, accessibility and utilization of FPSs, with the view to answering the research questions posed in the next section and finally,to suggest an appropriate operational policy for FPSs' accessibility, effectiveness and utilization among women of reproductive age in the Lafia LGA.

1.1 Research questions

The following questions were posed for in carrying out the study:

i. To what extent do the socioeconomic milieus determine the accessibility and utilization of FPSs in Lafia LGA?
ii. Do women residing in the Lafia LGA understand FPSs?

iii. How do women's perception of FPS affect the accessibility and utilization of the services?
iv. How do location variables affect the accessibility and utilization of FPSs in the study area?

1.2 Research objectives

The study aimedat analyzing the impacts of FPSs' accessibility and utilization on the selected wards in Lafia LGA. In order to achieve this aim, the following objectives were generated:

1. Analyze the impacts of socio-economic milieus on accessibility and utilization of FPSs and methods and services among women of reproductive age in the study area;
2. Examine the effects of enlightenment on accessibility and utilization of FPSs and methods and services; and
3. Examine the consequences of location on the accessibility and utilization of FPSsin Lafia LGA and Nasarawa State.

2. Literature Review

2.1 Concept of family planning

A number of studies on sexual and reproductive health andfamily planning (FP) have been conducted globally, regionally and locally to identify the gaps in the accessibility of FPSs. Some of these studies have come up with various findings and recommendations which have contributed in furthering people's knowledge ofFP terms or concepts. To put this review into proper perspective, there is a need to understand the concept of FP. By definition, FP refers to the practice that helps individuals or couples avoid unwanted pregnancies or unplannedbirths, regulate the interval between pregnancies, control the timing at which births occur with respect to the age of women and determine the number of children in the family (Family Planning, 2018; Kantorova et al., 2020). From the above definition, FP can be described asa method employed by families to have a desired number of children at a desired time. This was expatiated by the WHO (2020), noting that the most important reason forFP is to provide high-quality health for the children and mothers.

In Nigeria, the government policy on family health institutionalized a Family Planning National Communication Campaign Plan (NFPCP) that aimed at decreasingmaternal, infant, and child morbidity and mortality by increasing the knowledge and use of modern FP methods (FMoH, 2018). In the plan, it was acknowledged that FPmethods reduce maternal mortality byreducing the number of unintended pregnancies, the number of abortions, and the proportion of births at high risk. Furthermore, the plan indicated that meeting women's need for modern contraceptives would prevent about one-quarter to one-third of all maternal deaths, therebysaving 140,000 to 150,000 lives per year (FMoH, 2018).

2.2 Knowledge of people about FPS

According to Kennedy et al. (2011), lack of knowledge or ignorance about FPS affect the use of the services, despite the fact that the lack of it increases the risk of adverse health, demographic and socio-economic outcomes for women and society at large. The authors further emphasize that limited information about FP services results from poor access to information about family as well as the socio-cultural expectations of marriage and child bearing. Although the research reflects a positive outcome regarding people's knowledge of FPSs, it does not show how other factors such as location, distribution or distance affect people in accessing these services. Apart from that, the authors could not relate their findings to the issue of whether or not family planning affects the socio-economic life of the people. This study will not only cover the mentioned areas but will seek a proper solution to such unmet needs of family planning in Lafia LGA.

A study conducted by Alegeet al. (2016) revealedthat nearly all (98.1%) the participants have knowledge of FP methods and that such knowledge was specifically for short-term FP methods. For instance,the majority (98.3%) had knowledge about male condoms, followed by pills (97.9%) and injectables (97.6%).For the long-term knowledge of FP methods, implants accounted for 91.7 per cent, followed by intra-uterine devices (89.1%). The majority of the participants were equally knowledgeable of the permanent FP methods, with femalesterilization accounting for 79.3 per cent and male sterilization for77.6 per cent. In the same vein, another study conducted by Olarinmoye (2013) in the metropolis of Oshogboin Osun Stateindicated that the majority (90.3%) of respondents were aware of modern methods of FP. Over three-quarters (76.0%) claimed knowledge of a location to obtain FPS, whilefewer than three-quarters (74.9%) acknowledged at least five methods of FP.

2.3 Factors affecting the use of FPS

Scholars have argued that socioeconomic, demographic and psychosocial factors affect access and the use of FPSs. A study carried out in two districts in Uganda by Nalwadda (2009) found that deep-seated misconceptions about FPSsoutweigh issues on side effects, and the belief that side effects are permanent have created confusion between side effects and misconceptions. The male respondents believedthat women negotiating for FPSsareoverly sexualized, therefore stigmatized. On the other hand, the majority of married and unmarried women who participated in the study believed that pills destroywomen's eggs and are therefore skeptical about their usage. Moreover, the majority of male and female participants submitted that the continued usage of pills increases bodyfats and causes illnesses such as fibroids, cancer, and destruction of the fallopian tubes.It was found that objections mainly from partners (particularly males), parents, society, church, schools and health units with conflicting positions in favor of or against the use of FPS have resulted inconflicting messages relating to FP. The finding of this study concluded that critical health service barriers existing in Uganda have resulted inthe persistent high fertility rate in country.Meanwhile, a study carried out in the northwestern Nigeria indicated that FPSs are influenced by numerous factors, including social norms for high fertility, pro-natal cultural and religious beliefs, and gender inequalities (Hutchinson et al., 2021).

2.4 Location and use of FPS

The residence of people and where FPSsare located may affect theiraccessibility and utilization. According to the study conducted by (2011) in Nigeria, it was revealed that two-fifths (40%) of women interviewed have never attended an FP clinic nearest to their homes. However, in the study of Hoke et al. (2012), it was shown that distance affects the effective access and utilization of FPSs. Hence the study submitted that there is a need for community-based distributors (CBDs) for FP products. The study further noted that without these distributors, women who often travelled long distances to reach aFPS location may eventually lost interest in FP products' utilization. This clearly indicated that distance could be a factor hindering the effective utilization of FPSs in some communities such as Lafia. Similarly, another study by Mekonnen and Worku (2011) identified distance as one of the factors which hinder the accessibility of FPS. Also,Bersamin and Todd (2011), in their study of effects of distance on the utilization of FPSs among women, suggested that long distance decreased the chances of utilizing FPSs. Therefore, increased options for FPS such as an outreach may lead to increased access of family planning.

2.5 Distribution of FPS and utilization

Distribution, supply and allocation of FPSs vary significantly within and among countries and societies. This affects the rate of accessing and utilizing FPSs. Rutstein (2005) observed that in some places, birth control measures are not available because of lack of actual FPSs. He further explained that in most cases, the non-availability of health workers to administer FP products to people or health facilities to deliver FPS resulted in many FP products being left wasting away in stores where they were kept. This supposedly indicated that the lack of health workers to work in

the field and render the required FPSs can also significantly affect their utilization. In support of the above assertion, the study carried out in Ethiopia by Singh and Darroch (2012) revealed that women would need to make a round-trip of up to four days to receive a three-month family planning service. This could be discouraging and tiresome for those who have an unmet need for FPSs. This could also be investigated as it affects FPS in Lafia LGA: the study could highlight the scope. As indicated by Save the Children (2004), FP programs have shown that people without formal training on the utilization of FPS could effectively become distributors of FP products such as condoms and pills. However, advancedor permanent methods of the services, such as intrauterine devices (IUDs) orsterilization should be administered by trained health professionals.

2.6 Theoretical framework

Undertaking the study of the accessibility and utilization of FPSs in Lafia LGA of Nasarawa State, the health belief model (HBM) and rational choice theory (RCT) wereadopted. The HBM was first developed in the early 1950s by social scientists at the US Public Health Services in order to understand the failure of people to adopt disease prevention strategies or undergo screening tests for the early detection of disease. The model hypothesizes that health-related behavior depends on the combination of several factors, namely perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. Since then, the model has been adapted to explore a variety of long-and short-term health behaviors, including sexual risk behaviors and reproductive health behavior.

To ground the model into the study, Basavanthappa (2009) stated that the purpose of the HBM is to help in identifying conditions that either facilitate or impede utilization of services. Thisthereforepoints to health beliefs such as attitudes, values and knowledge that might influence women's subsequent perceptions of the need and use of certain health services. In other words, the modelexplains the reason why couples would take recommended health-related action as against the perceived negative health condition by using contraceptive and other FP methods that will prevent unintended pregnancy and risks associated with child bearing. In essence, the model is adjudged consequent upon perceived risks (susceptibility) to contracting sexually transmitted infections sexually-transmitted diseases (STIs) such as HIV/AIDS, the severity of the condition, benefits or barriers (use of condom), cues that will motivate action and self-examination.

In addition, to possess more understanding of the indispensability of FPS, other issues such as socio-economic, cultural or religious factors which tend to affect people's choice in the utilization of family planning services also deserve examination. Hence, the study adoptedthe RCT to support the study in examining the behavior of respondents based on their choice in the utilization of FPSs. The proponent of this theory was George Homans (1961). The theory posits that people take logical decisions based on what they think are of great benefit to them. It assumes that when people are faced with economic and social phenomena, they weigh the merits and demerits of these phenomena before opting for what will favor them. According to Crossman (2017), people often calculate the likely costs and benefits of any action before deciding on what to do. In this regard, the clarification of the concepts and theories is of paramount importance to this study because it provides a guide for the researchers to understand the content of the topic. It also explains the rationale for the choice of accessing and utilizing FPS by womenin the selected five wards of Lafia LGA.

3. Method

3.1 Sampling techniques

The study adopted a research survey design and the quantitative method of data collection. A purposive sampling technique was considered in selecting Lafia LGA out of 13 LGAs in Nasarawa State, namely Adogi, AgyraguTofa, Ashigye/Ugah, Akurba, Arikya/Mankwa, Assakio, Chiroma, Gayam, KeffinWambai, Makama, Shabu/Kwandare, and Zanwa. Five (5) wards were randomly selected out of the thirteen (13), of which four (4) PHC centers were selected using a simple random technique. The selection of the five wards and the PHC centers represented the geographical spread of the study area, in which the potential respondents would be selected to form a normal distribution. Also, the selection assumed the potential respondents to have had experience with FPS providers in relation to factors limiting FSP accessibility and utilization among women in the study area.

3.2 Data collection and analyses of data

Twenty (20) well-structured questionnaire forms were randomly distributed in each of the four (4) PHC centers in the selected five (5) wards, totaling 20 PHC centers. In all, 400 questionnaires were randomly administered with the help of two field assistants to women within the reproductive age group of 15 and 45 years in the selected PHC centers. The variables of interest in the questionnaire to collect information from respondents were those related to their socioeconomic characteristics, knowledge and reasons impacting the utilization of FPS, as well as data on location as they impacted the accessibility of FPS in the study area. Descriptive and inferential (chi-square) statistics were employed for the data analyses.

Table 1: Selected Primary Health Care Centers from selected wards in Lafia LGA

S/N	Wards	No. of PHC	No. of Selected PHC	Selected Primary Health Care
1	Ciroma	12	4	Model PHC T/Kawari Lafia, PHC Clinic Wadata, Maina Clinic Lafia and PHC Sabon Kasuwa Lafia,
2	Adogi	12	4	PHC Clinic Adogi, PHC Clinic Akura, PHC ClinicPeperuwa, and PHC Clinic G/Maiakuya,
3	Akurba	9	4	PHC Clinic Akurba, PHC Clinic Agwanrere, PHC Clinic B/Rijiya and PHC Clinic Agbija,
4	Shabu /Kwandare	7	4	PHC Model clinic Shabu, PHC Clinic Azuba, PHC Clinic Kwandare, and PHC Clinic Dankan Bako,
5	Assakio	11	4	CHC Clinic MararabaAkunza, PHC Clinic Agudu, PHC Clinic Wakwa, and PHC Clinic Akunza
	Total	**52**	**20**	

Source:Nasarawa StatePrimary HealthCare Board, Lafia, 2021.

4. Results and Discussion

4.1 Socioeconomic milieus of respondents using family planning methods

4.1.1 Age group

Table 2indicates that close to three-fifths (58.5%) of the selected women who haveever used FP were of the age group 15 to 45 while two-fifths (41.5%) havenever used any of the FP methods. The most prominent among the age groups who haveever used any family planning methods was 21-25 years (25.9%), followed by 26-30 years (17.6%) and 15-20 years (15.0%). On the other hand, the majority (19.7%) of the selected women within the age group 26-30 years have never

used any family planning methods, followed by women between 31-35 years (11.4%), 36-40 years (7.8%) and 41-45 years (2.6%).

The implications of the above table is that since the proportion of teenagers and young adults was prominent among the age groups. There is possibility that the utilization of FP methods led to experimenting with their propensity of being sexually active out of curiosity, or perhaps some of them had got married at a very early age but were still undergoing either educational training or skill acquisition, or they could be trying to space the birth of their children.

Table 2: Age Group of Respondents who have used Family Planning Methods

Age group	Ever used family planning		Total	χ^2	df	P-value
	Yes	No				
15-20 years	58(15.0)	0(0.0)	58(15.0)	10.71	5	0.05
21-25 years	100(25.9)	0(0.0)	100(25.9)			
26-30 years	68(17.6)	76(19.7)	144(37.3)			
31-35 years	0(0.0)	44(11.4)	44(11.4)			
36-40 years	0(0.0)	30(7.8)	30(7.8)			
41-45 years	0(0.0)	10(2.6)	10(2.6)			
Total	226(58.5)	160(41.5)	386(100)			

Source: Authors' fieldwork, 2021

On the other hand, women who responded that they have not ever used FP methods could be as a result of their ignorance of its purpose, spouses' dominance or religious sentiments against the services. Thus, according to the above data, the utilization of FP is statistically significant at p = 0.05 among the age groups.

4.1.2 Marital status

Table 3 reveals that two-fifths (40.4%) of the respondents ever used family planning were married, and less than one-fifth (18.1%) of them were single. Meanwhile, two-fifths (41.5%) of the them that were divorced not using any family planning methods

Table 3: Marital Status of Respondents who have used Family Planning Methods

Marital status	Ever used family planning		Total	χ^2	df	P-value
	Yes	No				
Single	70(18.1)	0(0.0)	70(18.1)	4.39	2	0.05
Married	156(40.4)	148(38.4)	304(78.8)			
Divorced	0(0.0)	12(3.1)	12(3.1)			
Total	226(58.5)	160(41.5)	386(100)			

Source: Authors' fieldwork, 2021

By implication, although the majority of married respondents were using FP, their numbers did not differ significantly from those who had not. This scenario might be in agreement with some traditional norms in African settings, which believe that children are symbols of wealth and power. In other words, a man having many children represents his riches and prowess among his peers in society. On the other hand, there is a belief according to the polygamous system that the number of children a woman bore would determine the quantity of inheritance such woman would have after the demise of her husband, hence explaining theirnot utilizing any of the FP methods. Another factor could have been that of religion, which forbids married women using any contraceptive. However, the proportion of single women using FP has caused a shift from

the normative paradigm of the African society stigmatizing any unmarried woman engaging in sexual acts as a prostitute or harlot. There isthus a significant association (p = 0.05) between marital status and the utilization of FPS.

4.1.3 Religion

Table 4 shows that over one-third (34.8%) of the sampled women who haveever used family planning methods were practicing Islam as against less than two-fifths (37.7%) of them not using family planning. Close to half (24.3%) of the women selected who haveever used family planning were practicing Christianity as against very few (2.4%) of them not using FP, while an insignificant number (0.5%) of them who haveever used FP were practicing African traditional religion.

Table 4: Religion of Respondents who have used Family Planning Methods

Religion	**Ever used family planning**		**Total**	**χ^2**	**df**	**P-value**
	Yes	**No**				
Christianity	92(24.3)	9(2.4)	101(26.6)	4.90	2	0.05
Islam	132(34.8)	143(37.7)	275(72.6)			
African Traditional Religion (ATR)	2(0.5)	1(0.3)	3(0.8)			
Total	226(59.6)	153(40.4)	379(100)			

Source: Authors' fieldwork, 2021

Table 4 implies that since Islam is the prominent religion practiced in the study area, it is probable that the majority of women were following the teachings that forbid the use of FP. According to the literature, there were mixed feelings about the utilization of FP. Some Islamic scholars equated FP with infanticide and it was thus forbidden in Islam while other scholars defended the use of contraception or birth control methods in Islam (Ghazi, 1993; Abdi et al., 2020). On the other hand, some Christian organizations teach FP and encourage the use of contraception to their followers in planning or spacing their children (Sundarajan et al., 2019). Therefore, the decision of a woman to adopt any of the FP methods depends largely on the religious traditions and teachings. Nevertheless, there is significant association at p = 0.001 between the use of FP and women's religion in the study area.

4.1.4 Educational background

Table 5 indicates that over two-fifths (41.5%) of the selected women who haveever used FP methods had a tertiary educational background with less than one-third (30.52%) having a secondary qualification. The majority (16.3%) of selected women who have never used FP had a primary education, which was more than twice (7.3%) and three times more (4.4%) than those with tertiary and non-formal education, respectively.

Table 5: Educational Background of Respondents who have ever used Family Planning Methods

Education	Ever used family planning		Total	χ^2	df	P-value
	Yes	No				
Non formal education	0(0.0)	17(4.4)	17(4.4)	6.51	3	0.05
Primary education	0(0.0)	63(16.3)	63(16.3)			
Secondary education	118(30.5)	0(0.0)	118(30.6)			
Tertiary education	160(41.5)	28(7.3)	188(48.7)			
Total	278(72.0)	108(28.0)	386(100)			

Source: Authors' fieldwork, 2021

Table 6 implies that since education develops the critical thinking ability of a person in the form of knowledge, this results in logical thinking when making decisions. This statement is reflected in the high proportion of respondents with secondary and tertiary qualifications adopting FPSs as against the few of them being skeptical or ignorant and not using any FP methods. Irrespective of other social milieus, education is thus statistically significant (p = 0.05) to the utilization of FP methods among the selected respondents.

4.1.5 Level of income of respondents

According to Table 6, the majority (58.5%) of the selected women who have ever used FP methods had an income less than the minimum wage of 18,000 Naira or less than one dollar per day, while over one-tenth (12.8%) of them received exactly the minimum wage or more. A few (4.4%) of the respondents had an income of between 33,000 Naira and above.

Table 6: Level of Income of Respondents who have ever used Family Planning Methods

Level of Income (Naira)	Ever used family planning		Total	χ^2	df	P-value
	Yes	No				
Less than 18,000	226(58.5)	49(12.8)	275(71.2)	8.44	4	0.05
19,000-25,000	73(18.9)	0(0.0)	73(18.9)			
26,000-32,000	21(5.4)	0(0.0)	21(5.4)			
33,000-39,000	0(0.0)	11(2.8)	11(2.8)			
40,000 and above	0(0.0)	6(1.6)	6(1.6)			
Total	320(82.8)	66(17.2)	386(100)			

Source: Authors' fieldwork, 2021

In addition, as seen in Table 6, it seems that most of the sampled women were of the low-income group and lived below the poverty line of less than a dollar per day. This study correlates with the works of Ringheim and Gribble (2010) in four sub-Saharan Africa countries. They found that 83.0 per cent of women between the ages of 15 and 49 years live within the low-income groupbut had higher education qualifications. Table 6 thus shows that the level of income is statistically significant to the use of family planning at p = 0.05.

4.1.6 Occupation of respondents

According to Table 7, over one-third (35.5%) of the sampled women who have ever used FP were into trading and or business while a few (5.7%) of them were civil servants. The majority (24.9%) of the selected women who havenever used family planning methods were unemployed. They are followed by those in civil service (16.6%), trading or business and the least (5.7%) in farming.

The implication of this result is that since a substantial proportion of the respondents were unemployed, there could be the possibility of beingunable to access any of the FPSs owing to financial limitations.

Table 7: Occupation of Respondents who have ever used Family Planning Methods

Occupation	Ever used family planning		Total	χ^2	df	P-value
	Yes	No				
Farmer	0(0.0)	22(5.7)	22(5.7)	9.10	4	0.05
Trader/business	137(35.5)	45(11.7)	182(47.2)			
Civil servant	22(5.7)	64(16.6)	86(22.3)			
Unemployed	0(0.0)	96(24.9)	96(24.9)			
Total	159(41.2%)	227(58.8%)	368(100)			

Source: Authors' fieldwork, 2021

This could therefore leave them at the mercy of their spouses' denying them monetary assistance in accessing FPSs. Occupation is thus statistically significant to the use of FP at $p = 0.05$.

4.1.7 Location of residence of respondents

Table 8 reveals that over half (53.0%) of the selected women who have ever used family planning methods were residing within the urban areas while a small proportion (4.8%) of those in urban areas have never used any of the methods. Only a few (7.8%) of the respondents who have ever used FP methods lived in the rural areas as against one-third (35.2%) of those who have never used any of the FP methods.

Table 8: Location of Residence of Respondents who have ever used Family Planning Methods

Location of Residence	Ever used family planning		Total	χ^2	df	P-value
	Yes	No				
Urban	197(53.0)	15(4.0)	212(57.0)	3.76	1	0.05
Rural	29(7.8)	131(35.2)	160(43.0)			
Total	226(60.8%)	146(39.2%)	372(100)			

Source: Authors' fieldwork, 2021

Table 8 implies that there is a wide disparity between the urban women and their rural counterparts when it comes to the issue of FPSs. This could be as a result of a lack of FP centers in most of the rural settings within the study areas. In addition, there is the possibility of a total absence of enlightenment, awareness and knowledge of the FPSs available to women in need of such services. Table 8 thus shows that location is statistically significant to the use of FP in the study area at $p = 0.05$.

4.2 Factors associated with the family planning utilization in the study area

Table 9 reveals that three-quarters (75.4%) of the selected women for the study had knowledge of FP utilization with less than one-quarter (24.6%) of them having no prior knowledge. Regarding the frequency of any methods of FP utilization, the majority (46.5%) of the respondents reported to be using family planning regularly, slightly above one-third (34.2%) not regularly and less than one-fifth (19.3%) not ever using any FP methods. As regards the purpose for using any of the family planning methods, almost half (47.2%) gave the spacing of their children as the main purpose, above one-quarter (27.9%) indicated preventing unwanted pregnancies, very few of them (5.5% and 3.8%) indicated giving pleasure and preventing STDs, respectively as purposes of using family planning.

Almost half (49.2%) of the respondents were using one method or the other in the course of the study while over two-fifths (43.5%) were not using any method. The majority (51.0%) of the selected women have been using family planning methods for more than six years while 46.0 per cent started using family planning less than five years ago.

The implications of the above analyses are firstly, that more women are becoming aware of the FPSs; however, these are largely in the urban centers. The majority of the women in the rural areas are still unaware of the services or are being deprived of its utilization by the dominance of their partners or spouses. Secondly, some services centers are either far from being accessible or are not available in the supposedly nearby services centers. Thirdly, such services are not affordable owing to poverty, particularly regarding women in the rural setting. All the factors listed above are thus statistically associated with the utilization of family planning methods in the study area at $p = 0.001$.

Table 9: Awareness and Purpose of Family Planning Services and Methods Utilization Ever used any family planning methods

	Count	Percent (%)	χ^2	df	P-value
Knowledge of family planning					
Yes	300	75.4			
No	98	24.6			
Total	398	100.0	3.44	1	0.05
Frequency of usage					
Always	90	22.6			
Often	95	23.9			
Rarely	136	34.2			
No response	77	19.3			
Total	398	100.0	7.21	3	0.05
Reason for usage					
Spacing	188	47.2			
Preventing unwanted pregnancies	111	27.9			
Pleasure	22	5.5			
Preventing STDs	15	3.8			
No response	62	15.6			
Total	398	100.0	9.34	4	0.05
Rating of services					
Very good	192	48.2			
Good	135	33.9			
Bad	44	11.1			
No response	27	6.8			
Total	398	100.0	7.11	3	0.05
Are you currently usingFP					
Yes	196	49.2			
No	173	43.5			
No response	29	7.3			
Total	398	100.0	4.89	2	0.05
Duration of usage of FP					
Less than 5 years	183	46.0			
6-10 years	112	28.1			

11-15 years	58	14.6			
16 years and above	33	8.3			
No response	12	3.0			
Total	398	100.0	8.24	4	0.05

Source: Authors' fieldwork, 2021

4.3 Factors associated with the family planning accessibility in the Study Area

In terms of the accessibility of the sample women to family planning services and methods in the study area, half (50.3%) of them responded that their residences were closed to the facility centers where they can access the services and methods while almost two-fifths (39.9) responded not closed to the facility center. Over half (52.0%) of the respondents lived within the range of less than 5km to the facility centers, yet quite large proportion (45.1%) of them residing within the range of more than 5km and 20km to the facility center. The distance to the facility center, however, has effect on time taken some of the respondents to the facility center.

Table 10: Factors Associated with the Accessibility of FPS Ever used any family planning methods

	Count	**Percent (%)**	χ^2	**df**	**P-value**
Closeness of home to facility					
Yes	200	50.3			
No	159	39.9			
No response	39	9.8			
Total	398	100.0	5.91	2	0.05
Distance to health facility					
Less than 5km	207	52.0			
More than 5km	83	20.9			
More than 10km	40	10.1			
Less than 20km	37	9.3			
Above 20km	19	4.8			
No response	12	3.0			
Total	398	100.0	10.13	5	0.05
Time taken to reach health facility					
30 minutes	202	50.8			
45 minutes	93	23.4			
1 hour	75	18.8			
1 hour 15 minutes	16	4.0			
No response	12	3.0			
Total	398	100.0	8.85	4	0.05
Means of getting to health facility					
Trekking	93	23.4			
Motorcycle	230	57.8			
Vehicle	70	17.6			
Canoe	1	0.3			
No response	4	1.0			
Total	398	100.0	8.29	4	0.05

Source: Authors' fieldwork, 2021

The results indicate that, 46.2 per cent of the selected women would take 45 minutes to 1hour 15 minutes to reach the facility center, while half (50.8%) of them could reach the facility within 30 minutes. Furthermore, the duration taken to reach the facility center has to do with their means of mobility to the facility. Three-quarters (75.7%) of the respondents incurred the cost of transportation (motorbike, vehicle, canoe) to the facility center while over one-fifth (23.4%) accessed the facility center by trekking, according to Table 10.

By implication, the above analyses depict FPSs centers are not widespread among most of the residential locations (urban and rural settings) while accessibility to most of the facilities takes much time, energy and cost. This spatio-temporal lag could negatively impact women's motivation, zeal and enthusiasm to reach out to FPSs. This scenariopertains particularly to women in the rural area, especially those in the study area. In summary, accessibility factors have statistical significance to FPSs and methods at $p = 0.05$ in the study area.

5. Recommendations

Based on the foregoing, the following recommendations are suggested:

1) It is necessary to intensify efforts towards the education or enlightenment of people on FPSs. This will help in reducing the percentage of people who are either misinformed or who lack the requisite knowledge about family planning.
2) It is also necessary for the government to control the underrated health centers, unlicensed agencies or pharmacists that are offering FPSs. This will reduce the incidence of the adverse drug effects of FP treatment due to wrong prescriptions for people who need them.
3) There is also a need for the government to build more health centers with the capability ofoffering the necessaryFPSs tooutlying communities or to those who do not have easy access to the existing ones.

6. Conclusion

In view of the above discussion, the study therefore concluded that the utilization of FPSs in Lafia is fairly good because almost half of the respondents (about 49.2%) returned a positive response. However, there are good percentages of the population that indicated they have limitations regarding the access and utilization of these services. Such limitationsrelated to factors such as distance, location, religion, culture, and lack of confidentiality of partners with their spouse.

7. References

Alege, S. G., Matovu, J., Sensalire, S., &Nabiwemba, E. (2016). Knowledge, sources and use of family planning methods among women aged 15-49 years in Uganda: A cross-sectional study. *Pan African Medical Journal*, 24(39). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC/4992376

Abdi., B., Okal, J., Serour, G., & Temmerman, M. (2020). "Children are a blessing from God" – A qualitative study exploring the socio-cultural factors influencing contraceptive use in two Muslim communities in Kenya. *Reproductive Health*, 17(1), 44. https://doi.org/10.1186/s12978-020-0898-z

Bersamin, M., & Todd, M. (2011). *Effects of distance on utilization of family planning services among adolescents*. http://www.ncbi.nlm.nih.gov/pubmed/

Basavanthappa, B. T. (2009). *Nursing research* (2nd ed.) Japee. https://www.researchgate.net

Crossman, A. (2017). *Learn about rational choice theory*. www.thought.com/rational-choice-theory. World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP) (2018). *Knowledge for health project. Family planning: A global handbook for providers* (3rd ed.). CCP and WHO. https://apps.who.int/iris/bitstream/handle/10665/

Federal Ministry of Health (FmoH) (2018). *National family planning communication plan (2017-2020): Strategy for increasing the use of modern contraceptives in Nigeria, Abuja, Nigeria.*

https://www.health.gov.ng/doc/NATIONAL%20FAMILY%20PLANNING%20COMMUNICATION%20PLAN%202017%20(REVISED).pdf
Ghazi, M. A. (1993). A family decision: The Muslim view. *Asiaweek*. PMID 12345272.
Hoke, T. H., Wheeler, B., Lynd, K., Green, M. S., Razafindravony, B. H., Rasamihajamanana, E., & Blumenthal, P. D. (2012). Community-based provision of injectables contraceptives in Madagascar: 'task shifting' to expand access to injectables contraceptives. *Health Policy and Planning*, 27(1), 52-59. https://doi.org/10.1093/healpol/czr003
Homans, G.C. (1984*). Exchange and rational choice theories*. https://hirr.hartsem.edu.
Hutchinson, P. L., Anaba, U., Abegunde, D., Okoh, M., Hewett, P. C., & Johansson, E. M. (2021). Understanding family planning outcomes in northwestern Nigeria: Analysis and modeling of social and behaviour change factors. *BMC Public Health*, 21(1168). https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-11211-y
Johnson, O., & Ekong, I. (2015). Knowledge, attitude and practice of family planning among women in a rural community in Southern Nigeria. *Journal of Advances in Medicine and Medical Research*, 1-8. https://doi.org/10.9734/BJMMR/2016/1840
Kantorová, V., Wheldon, M. C., Ueffing, P., &Dasgupta, A.N.Z. (2020). Estimating progress towards meeting women's contraceptive needs in 185 countries: A Bayesian hierarchical hierarchical modeling study. *PloS Med*,*17*(2), e1003026. https://journals.plos.org/plosmedicine/article?id=10.1371/
Kennedy, G. N, Azzopardi, P., & Creati, M. (2011). *Adolescent fertility planning in East Asia and the pacific: A review of DHS reports*. http://www.reproductivehealthjournal.com
Mekonnen, W., & Worku, A. (2011) Determinants of low family planning use and high unmet need in Butajera District, South Central Ethiopia. Bio Med., 2011.
Nalwadda, G., Mirembe, F., Byamugisha, J., & Faxelid, E. (2009). Persistent high fertility in Uganda: Young people recount obstacles and enabling factors to use of contraceptives. *BMC Public Health*, *10*(1), 1–13.
National Population Commission (NPC) Nigeria and International Classification of Functioning (ICF). (2019). *Nigeria demographic and health survey 2018*. NPC and ICF. https://dhsprogram.com/pubs/pdf/FR359/FR359.pdf
Obinna, C. (2017). *Family planning: Uganda's success, lesson for Nigeria.* http://www.vanguardngr.com/2017/05/family-planning
Olarinmoye, O. (2013). Barriers to use of modern contraceptives among women in an inner city area of OshogboMetropolis, Osun State, Nigeria. *International Journal of Women's Health, 5,*647–655.
Okech, T. C., Wawire, N. W., & Mburu, T. K. (2011). Contraceptive use among women of reproductive age in Kenya's city slums. *International Journal of Business and Social Science, 2*(1), 22–43.
Oyeniran, O. F., Ononuju, C., Ayeni, H. A., & Ogbe, A. E. (2020). Modern contraceptive preferences among women accessing family planning services at a specialist hospital in North Central Nigeria. *Jos Journal of Medicine*, *8*(2). https://www.researchgate.net/publication/370683038_modern_contraceptive_preference_in_dash_2014
Qasim, M., & Bashir, A. (2013). Motivational factor and adoption of family planning methods by married women. *Middle-East Journal of Scientific Research, 17*(12),1626. https://www.idosi.org/mejsr/mejsr17(12)13/1.pdf.
Rutstein, S. O., (2005). Effects of preceding birth intervals on neonatal, infant and under-five years mortality and nutritional status in developing countries: evidence from the demographic and health surveys Int J Gynaecol Obstet. 2005(1), 7-24. http://doi.org/10.1016/j.ijgo.2004.11.012
Sundarajan, R., Yoder, L. M., Kihunrwa, A., Aristide, C., Kalluvya, S. E., Downs, D. J., Mwakisole, A. H., & Downs, J. A. (2019). How gender and religion impact uptake of family planning: Results from a qualitative study in Northern Tanzania. *BMC Women's Health*,*19*(99). https://doi.org/10.1186/s12905-019-0802-6
Ringheim, K., & Gribble, J. (2010). *Improving the reproductive health of sub-Saharan African's youth: A route to achieve the millennium development goals*. Population Reference Bureau, Washington, DC.
Sweta, M. B., & Singh, S. (2010). Knowledge and pattern of family planning adoption in Kashi. *Institute of Social and Economic Research, Nigeria*, 1-20.
Singh, S., & Darroch, J. (2012). *Adding it up: The costs and benefits of contraceptive services estimates for 2012*. Guttmacher.

World Bank (2021). IBRD-IDA. Gender Data Portal: Fertility rate, total fertility (birth per woman) https://genderdata.worldbank.org/indicators/sp-dyn-tfrt-in/
United Nations Children's Fund (UNICEF). (2012). *Progress in child well-being: Building on what works.* https://www.hst.org.za/publications/NonHST%20Publications/Progress_in_child_well-being.pdf
United Nations Population Fund (UNFPA). (2017). Family planning. Available online @ http://www.unfpa.org
World Health Organization (WHO). (2020). *Family planning/contraceptive methods.* https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception

Appendix

SURVEY QUESTIONNAIRE

Dear Ma
The researchers are from the Federal University of Lafia, conducting a research study on the topic: ***"Impacts of socioeconomic milieu, enlightenment and location on the utilization and accessibility of family planning services among women in Lafia LGA, Nasarawa State"***.

Kindly offer the necessary assistance by providing useful information on the topic as such information would be considered confidential and used only for the purpose of this study.

Thank you.

INSTRUCTION: This questionnaire is designed for individuals (particularly adults) residing in Lafia Local Government Area of Nasarawa State.

SECTION I: Socio-demographic Data of Respondents-(Please tick or write where appropriate)

(1) Gender: Male ☐ Female ☐
(2) What was your age on your last birthday? ----------
(3) Marital status:
i. Single---------- ☐
ii. Married---------- ☐
iii. Divorced---------- ☐
iv. Widow ---------- ☐
v. Separated ---------- ☐
☐
(4) What is your religious denomination? Christianity ☐ Islam ☐ Others (specify) ----------
(5) Highestqualification: Primary ☐ Secondary ☐ Tertiary, ☐ No formal education ☐
(6) What is your level of income?
i.Less than 18,000 ☐
ii.18,000 – 25,000 ☐
iii.25,000 – 32,000 ☐
iv.32,000 – 39,000 ☐
v.39,000 – and above ☐
(7) Your occupation: ☐
i. Farmer---------- ☐
ii. Trader---------- ☐
iii. Business ---------- ☐
iv. Civil servant ---------- ☐
vi. Unemployed ☐
vii. Others (specify) ---------- ☐---

(8) Please classify your place of residence

i.Urban----------
ii.Rural----------

(9) What is the age of your husband? ----------

(10) At what age were you when you had your first baby ----------

SECTION II: Use of Family Planning Methods

(1) Do you use any family planning methods? Yes …… No……
(2) How often do you use family planning methods?
i.Always……
ii.Often…….
iii.Rarely……..
(3) Why do you use family planning?
i.Spacing…..
ii.Prevent unintended pregnancy….
iii.Pleasure……
iv.Prevent sickness……
(4) How will you describe family planning?
i.Very good
ii.Good
iii.Bad
(5) What modern method of family planning do you know?
i.Pill
ii.Condom
iii.Injectable
iv.Implants
v.Others specify----------
vi.Which traditional methods do you know? Specify----------

SECTION III: Knowledge of People about Family Planning (*Please tick or write where appropriate*)

(1) Have you heard about family planning? **Yes** ☐ **No** ☐
(2) Are you currently on any form of family planning? **Yes** ☐ **No** ☐
(3) How long have you known about family planning?
i.Less than 10yrs ---------- ☐
ii.10-20ys ---------- ☐
iii.20-30yrs ---------- ☐
iv.30-40yrs---------- ☐
v.40yrs and above---------- ☐
☐

SECTION IV: Sources of Information on Family Planning (*Please tick appropriately*)

(4) How did you know about Family planning?
i.Through the media ---------- ☐
ii.Neighbors---------- ☐
iii.Family---------- ☐
iv.Health workers---------- ☐
v.Public campaign---------- ☐
vi.Internet---------- ☐
vii.Other means (Please Specify) ---------- ☐
☐

SECTION V: Factors that Affect People in the use of Family Planning

1. Do you think distance can be a hindrance to people who wish to access Family Planning Services?

Yes ☐ **No** ☐

2. Does your **religion** prohibit the use of family planning? **Yes** ☐ **No** ☐
3. Give reason for your response----------
---
4. Have you ever discussed with your spouse/partner about family planning services? Yes…. No…..
5. If your answer to 4 is "Yes", did your spouse agree to the use of your family planning services? Yes….. No….
6. Does your **culture** prohibit the use of family planning? **Yes** ☐ **No** ☐
7. Are there any beliefs that may prevent you from seeking and utilizing family planning services? Yes…. No….
8. If "Yes" to question 7, what are they----------
---
9. Do you have any **personal** or **private** reason for not using family planning? **Yes** ☐ **No** ☐
10. If the your answer to 9 above is "Yes", please state reason: ----------
---
---

11. What should be done in order to improve accessibility of family planning services? Write down your suggestions----------
---

SECTION VI: Effect of Location on the use of Family Planning

(1) Is your house close to a family planning center/health facility? **Yes** ☐ **No** ☐

(2) How many kilometers are there from the location of your house to a family planning facility?

i. Less than 5km---------- ☐
ii. More than 5km---------- ☐
iii. More than 10 km---------- ☐
iv. Less than 20 km---------- ☐
v. Above 20 km. ---------- ☐

(3)What means do you use in reaching the health facility?

i. Trekking ---------- ☐
ii. Motor bike---------- ☐
iii. Vehicle---------- ☐
iv. Canoe ---------- ☐
v. Others (Please specify) ---------- ☐----------
☐

SECTION VII: The Effect of Distribution on the Use of Family Planning

(1) Are there family planning facilities offering people services in your area? **Yes** ☐ **No** ☐

(2) Mention the names of a few of such facilities that you can remember

i. ----------
ii. ----------
iii. ----------
iv. ----------

(3) The family planning centres you mention or know of, are they govt. owned or privately owned?

i. Government owned----------
ii. Privately owned----------
iii. Non-governmental ----------

(4) Where are family planning services supplied to?

i.Trading shop
ii.Health facility
iii.Community health workers